



A Weekly Journal of Pharmacy and the Drug-trade.

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Chemists' and Druggists' Society of Ireland.
Pharmaceutical Society of Cape Colony.
South African Pharmaceutical Society.
Pharmaceutical Society of Natal.
Pharmaceutical Society of the Transvaal.
Pharmaceutical Society of Rhodesia.
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EXPORT TRADE.

BRITISH export business in chemicals, pharmaceutical products, and allied goods is prosperous. The principal reason for this is that the goods are liked by colonial and foreign buyers, whose agents here ought not, therefore, to be neglected by business houses at home who wish to have their share of the indents that merchant shippers receive. We shall give on March 14 an excellent opportunity of addressing them through the Merchant Shippers' Issue of THE CHEMIST AND DRUGGIST. The Publisher is now making arrangements for the issue, and those who wish to secure space in it should address him without delay.

Summary.

THE POISONS COMMITTEE'S REPORT was made public on Tuesday, and is printed on p. 321.

THE COMMITTEE says arsenic is carried in a lax manner;

THAT the Pharmaceutical Society has an onerous duty in prosecuting offenders; and

THAT farmers and gardeners suffer inconvenience through the poisons restrictions.

THE COMMITTEE recommends certain additions to the schedule which the Pharmaceutical Council may make next month; and further,

THAT preparations of arsenic, tobacco (or its alkaloids), and carbolic acid for certain purposes should be sold by anybody. For this a new Act will be necessary.

WE summarise the evidence on p. 325;

CRITICISE the report on p. 306; and

FURTHER NOTES regarding it will be found on p. 289, p. 292, p. 304 and p. 308.

AN important tabloid case is coming along (p. 290).

ALDERMAN J. L. SEATON, pharmaceutical chemist, of Hull, is dead (p. 303).

MR. DAVID HOWARD is President-elect of the Institute of Chemistry (p. 290).

A MIXTURE of salts for analysis is to be distributed to applicants on February 25 (p. 290).

COCAINE-PURCHASERS whom chemists are asked not to supply are referred to on p. 292.

DOVER CHEMISTS discussed the Poisons Committee's report on Wednesday evening (p. 310).

ADULTERATED COPAIBA is still common on the market, Mr. Parry says in a note on p. 332.

THE provisional programme for the B.P.C. meeting at Bristol on July 27 to 30 is printed on p. 290.

THIRTEEN CHEMISTS have got "off" win-licences this week, and ten have been refused (p. 292).

MR. T. TYRER has secured a concession from the railways in regard to the carriage of ether (p. 313).

A PETITION to proprietary-manufacturers is a feature in Association reports this week (pp. 301-3).

THE INTERNATIONAL PHARMACOPŒIA is moving on. Our Paris correspondent sends a note about it (p. 294).

SIR WILLIAM RAMSAY has not much faith in University degrees, and has written an article on the subject (p. 304).

IT was not a Boots' assistant who was fined in the Bloomsbury County Court last week, but one of Mr. Boutall's (p. 309).

THE SYRUP-OF-FIGS DECISION gives "Xrayser" the opportunity for some pleasant reflections on the poetry of pharmacy (p. 305).

PROFESSOR W. A. TILDEN is to be the next President of the Chemical Society, and Professor W. P. Wynne the junior Secretary (p. 298).

MR. KIRKBY's scheme for a university curriculum for pharmacists provides for a three-years course. He does not mean it for ordinary druggists (p. 299).

AN interesting report on the purity of commercial drugs was submitted by Mr. M. Meldrum to the North British Branch this week, and was followed by a discussion on standardisation (p. 296).

A LIVERPOOL CHEMIST sold a hot-water bottle, which burst when filled, on a woman's stomach. She and her husband sued for 800l. damages, but the jury did not agree on all points (p. 310).

MR. R. H. JONES says the declaration which Minor candidates have to submit as to their experience in dispensing is too frequently a formality, and he suggests greater stringency (p. 298).

THE SUMMONS UNDER THE DENTISTS ACT against Mr. Templar Malins has been dismissed on the facts by the Cardiff Magistrate (p. 311). We discuss the matter on p. 307, and print facsimiles of the advertisements on p. 332.

MR. ALEXANDER CROSS, M.P., who is not quite pleased with the Poisons Committee's report, is director of a company which the Pharmaceutical Society is prosecuting for selling an arsenical ant-destroyer contrary to Section 17 of the Pharmacy Act (p. 309).

THE drug-auctions have stimulated business a trifle this week but "outside" there is not much doing. Opium is dearer owing to higher Smyrna telegraphic advices and rumours of the winter sowings being destroyed. Morphine is strong and firmer in consequence. Spot cod-liver oil has again advanced, and potashes, Japanese wax, and shellac are all higher (p. 317).

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

All communications and reports must bear the names and addresses of the writers, not necessarily for publication. The reports of those who ignore this rule are liable not to be dealt with.

QUALITATIVE ANALYSIS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a *stamped and addressed envelope*, not a stamp merely) will be received up to Tuesday, February 24, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, March 7. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

The report on this month's analysis will be published next week.

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

The Grays Urban District Council has accepted the tender of Mr. A. Dyson, chemist and druggist, for the supply of disinfectants.

The *Daily Chronicle* of February 19 has an editorial on the Poisons report in which Mr. Alexander Cross and his opinions get the largest share of attention.

An important "tabloid" trade-mark infringement case is pending, in which the charge of substitution may be responded to by a counter-motion as to trade-mark rights.

At the annual meeting of the Institute of Chemistry, to be held this month, Mr. David Howard, who has long been Treasurer of the Institute, will be elected President, and Mr. A. Gordon Salamon Treasurer.

The annual meeting of the Society of Chemical Industry will be held in Bradford this year, when it is anticipated that 250 to 300 members will attend. A meeting to elect a local committee and officers to make arrangements for the reception of the Society took place on February 16.

The *Western Morning News* is pleased with the Poisons Committee's report, and says it might be advantageous, without increasing the danger to the public, to give greater facilities to certain trades to purchase poisonous substances, especially where agriculture is concerned, and Mr. Hanbury evidently intends to act on this principle.

At Mansfield Petty Sessions on February 12, Mr. Benjamin Adams, chemist and druggist, Mansfield, was fined 10s. and costs for storing 80 lbs. of gunpowder without having taken out a licence. It was explained that no notice of the expiration of the licence had been given by the County Council, and the renewal had been overlooked.

The annual report of the Manchester and District Mineral-water Trade Association shows that the number of

bottles recovered from all sources during the year amounted to 1,114,224, an increase of 154,776 on the previous year, representing a saving in value of 7,000l. Eighty per cent. of the manufacturers are willing to adopt a bottle-charging scheme.

At the Llanely County Court on February 16, Mr. Morgan W. James, a well-known local chemist, claimed 16l. 3s. 6d. from Messrs. L. Rose & Co. (Limited), 89 Worship Street, London, in respect of wine supplied not of the quality agreed upon. After hearing the evidence, Judge Bishop gave a verdict for the defendants, saying there was no evidence that the wine was not according to sample.

In the course of the hearing of a summons at Manchester Police Court on February 13, regarding the use of boric acid as a preservative for shrimps, the defendant said he had experimented upon himself as to the effect of boric acid on the system. He had taken 60 gr. per day, with the result that he increased in weight, and appetite so improved that he had to leave the Anti-breakfast League, of which he was a member.

At the meeting of the members of the newly formed Bradford Chamber of Trades on February 12, Mr. A. H. Waddington, chemist, was elected a Vice-President; Mr. B. Rogerson, chemist, was elected Hon. Secretary; and Alderman H. Dunn, chemist, was elected on the Council of the Chamber. Mr. J. A. Mitchell, the President of the Chemists' Association, becomes a Vice-President of the Chamber by virtue of a rule which gives that position to the President of each affiliated Association.

British Pharmaceutical Conference.

At a meeting of the Bristol Executive Committee at University College on February 13, Mr. J. W. White reported that the sub-committee unanimously recommended the University College buildings as the best for the meetings. The following programme was decided upon:—

Monday, July 27.—Evening reception at Royal Hotel, followed by dance and smoking-concert.

Tuesday, July 28.—Morning sessions. Lunch at Royal Hotel. Afternoon sessions. Excursion to Bath.

Wednesday, July 29.—Ladies' drive. Morning sessions. Lunch at Royal Hotel. Final sessions. Garden-party at Zoological Gardens.

Thursday, July 30.—Whole-day excursion to Chepstow and Wye Valley (Tintern), including Symonds Yat and Speech House if possible.

Sub-committees were appointed as follows:—

Financial.—Messrs. J. W. White, G. T. Turner, E. F. Young, and H. E. Matthews.

Excursion (including catering).—Messrs. G. T. Turner, E. F. Young, J. Chandler, and H. E. Matthews.

Music.—Messrs. Turner, B. Allen, and E. W. Hill.

Ladies.—Mesdames Allen, White, Chandler, Plumley, and Matthews. Chairman, Mr. B. Allen.

Dance.—Messrs. J. Chandler, J. T. Good, and J. W. White.

Reception.—Messrs. J. G. Plumley, J. T. Good, and A. L. Taylor.

Printing.—Messrs. White, Turner, Young, Matthews, and Boorne.

Hotels.—Messrs. E. W. Hill, A. L. Taylor, and H. E. Boorne.

Assistant-Secretary.—Mr. A. L. Taylor.

Appointing a Dispenser.

The Infirmary Committee of the Southampton Guardians have recommended that the following candidates for the appointment of resident lady dispenser at the infirmary be interviewed by the Board: Miss G. E. Stevens, St. Lawrence Rectory, Southampton; Miss L. A. Morton, 111 Millbrook Road, Southampton; Miss S. L. M. Barton, Alderlyde, Sholing; and Miss B. G. Austen, 1 Victoria Road, Runcorn. After a long discussion it was decided to defer the appointment for a month, many members expressing the opinion that it was unnecessary to appoint a permanent dispenser.

Birmingham Notes.

In the mineral-water dispute (occasioned by the rival claims of "Long Tom" and "Long Cecil," the Keystone Bottling Company recovered damages and an injunction.

Messrs. Richard Tomlinson & Sons inform us that they have disposed of the whole of the stock and fittings of Mr. J. S. Wilkes's Broad Street pharmacy to Mr. F. Adam, who is to carry on the business as a going concern.

The Young Men's Institute of Birmingham has received from Mr. Southall 100%, from Alderman Clayton 50%, from Mr. C. E. Naish (Southall Brothers & Barclay, Limited) 10%, and 8,605% from the Cadbury family towards the building scheme.

A pharmacist who has advertised in the local papers for an apprentice occasionally during the past six months did not have a single reply. Another finds that all applicants want wages ranging from 6s. to 10s. per week, their parents "objecting to premiums."

The *Midland Medical Journal* revives an old grievance in the alleged abuses by the public of the Birmingham Dispensary. One method, it is said, is for eight persons to combine, pay 2s. 7½d. each, and secure thereby relief allowances of medicine for eight "poor" persons.

The eighteenth annual exhibition of the Birmingham Photographic Society is to be held at the Royal Society of Artists, New Street, Birmingham, from February 21 to February 28. The Hon. Secretary is Mr. H. Voogt-Cornish, Norwich Union Chambers, Congreve Street, Birmingham.

In the shop of a high-class firm of chemists (writes our correspondent) a customer states that he recently saw a large and expensive plate-glass mirror on the door of a showcase defaced with a diamond in a way which will mean serious expense to the proprietors. This sort of thing is becoming unduly frequent in this locality, and stringent measures to stop it ought to be resorted to.

A hospital patient brought to a local pharmacist a short time ago a paper on which was written "Bathe the part with tepid water before applying the lotion." The customer had brought a bottle and requested to be supplied with the "tepid water," provided it was not expensive. When told what was meant, the unlearned patient declaimed against the prescriber in language not usually heard in drawing-rooms.

The Pharmaceutical Society's Secretary is to pay a visit to Birmingham, to confer with the local brotherhood, on Friday afternoon, February 20. It is suggested that he should look round at the numerous oil-shops and other *pseudo* chemists' shops where trading in poisons goes on in a wholesale manner. Especially ought he to visit the Sedgeley district, where it is positively asserted that out of a dozen persons "keeping open shop for the sale of poisons," only one is qualified.

The following prescription is going the round of local dispensers:—

Ferri sulph.	...	...	...	gr. xij.
Morph. sulph.	...	...	...	gr. j.
Ung. cetacei	...	...	...	3ij.

M. Ft. ung. More dicto utend.

It is evidently copied by a layman from a proper prescription, and has thus been somewhat mutilated; so much so that the second ingredient was mistaken for mag. sulph., which was used in not a few instances.

The following has caused a little flutter in the dovecotes of the unfledged:—

Ext. glycyrrhiz.	...	...	...	3j.
Sod. carb.	...	...	...	3j.
Tr. aloes	...	...	...	3ij.
Aq. ad...	...	...	...	3vj.

M. Ft. mist. 3j. t.d.s.

What should be done for the second ingredient if presented at the Minor examination? According to Mr. White, the Derby analyst, sodii carbonas exsic. would be correct.

Inter-Pharmacy Football League.

London College F.C. v. Pharmaceutical F.C.—This match was played at Wormholt Farm, Shepherd's Bush, on February 14. Play was fast and even from the start. Paterson opened the scoring for the "Square" by converting a penalty kick. Shortly afterwards Hewlett with a hot shot again beat the home custodian. Half-time: "Square," 2 goals; London, *nil*. After the interval the "Square" had rather the best of the exchanges, but the London forwards were dangerous at times, and at last succeeded in netting the ball. Before the finish Hewlett put on another goal for the "Square." Result: Pharmaceutical F.C., 3 goals; London College, 1 goal. (See also page 304)

L.C.C. Notes.

At the meeting of the London County Council on February 17, Mr. T. H. W. Idris was selected as one of the fourteen representatives of the Council on the Metropolitan Water Board. On the recommendation of the General Purposes Committee the salary of Dr. Frank Clowes, chemist to the Council, was increased from 1,000*l.* to 1,500*l.* In Dr. Clowes's report of the analysis and microscopical and bacteriological examination of the samples of water—572 in number—collected during December and January, it was stated that the oxidisable organic matter present during December in the water supplied by the six companies taking water from the Thames was larger than that present during December, 1901, and that in the water taken from the mains of two of the companies the average quantity of oxygen absorbed by the organic matter was about 50 per cent. more than that absorbed during the previous December. The average quantity of organic matter present during January, 1903, in the water supplied by five of the companies taking water from the Thames was larger in quantity than that present during January last year. Although the organic matter in the water was very largely of vegetable origin, there was on a number of occasions an increase of albuminoid ammonia. In the water supplied by several of the companies the average quantity of albuminoid ammonia present during the past two months was double that found in the corresponding period. As regards the unfiltered river-water from above the intakes of the companies, the chemist reports that there was also an increase in albuminoid ammonia. Dr. Clowes also states that during the past two months the water supplied by some of the companies on several days has been bacteriologically of an unsatisfactory character.

Masonic.

At the Installation Banquet of Lodge of Fidelity No. 3, held at Freemasons' Hall, Great Queen Street, W.C., on February 11, Bro. W. Watson-Will, Principal of the Metropolitan College of Pharmacy, was installed S.W., and Bro. T. W. Robson, pharmaceutical chemist, Tiverton, was made J.D.

Fires.

The Calder Soap-works, near Wakefield, belonging to Messrs. Hodgson & Simpson, were partly burnt down on February 14, damage estimated at from 15,000*l.* to 20,000*l.* being done.

The Ilkeston Fire Brigade on February 16 received a call to the premises of Boots' Limited, in Bath Street, Ilkeston. The firemen on arrival at the premises failed to discover any trace of fire, but on ascending the roof they found a hole which had apparently been made by a fire balloon descending upon the roof.

A great fire in Fitzroy Street, Cambridge, on February 13, resulting in a loss of 50,000*l.*, nearly involved the destruction of a shop belonging to Messrs. Sturton Bros., chemists. The premises were saved by a good strong party-wall and a very liberal supply of water. It was one of Messrs. Sturton's employes who discovered the outbreak, and the firm's fire appliances were used in assisting to cope with the flames. The books, papers, &c., were removed to a place of safety, but, happily, events proved that this precaution was not necessary.

On February 12, an outbreak of fire occurred at 84 North Albert Street, Fleetwood, the premises of Mr. W. T. Harlow, chemist and druggist. A neighbour discovered the cellar of Mr. Harlow's shop on fire, and gave the alarm. The brigade arrived in a few minutes, and after working for three-quarters of an hour, succeeded in putting the fire out. The outbreak originated through a gas-stove having been left burning in the cellar. The flooring of the shop was badly burned, and the shelves in the cellar, on which was a large stock of chemicals, were destroyed.

Overstocked with Drugs.

At the annual meeting of the subscribers to Huntingdon County Hospital on February 17, complaint was made that the dispensary was overstocked with drugs. The Rev. Dr. Gripper Banks attributed the great increase in the drugs to the frequent change in the house-surgeons. New men suddenly introduced, he said, ordered recklessly with no

knowledge of what was in stock, and a proper control of the drug-stores has been impossible. It was agreed that in future orders for drugs of over 5% should be countersigned by the Hon. Secretary.

Chemists' Licences.

Off wine-licences have been granted to—

Mr. Walter Huntrods, Topmoor Side, Holbeck.
Mr. G. Patrick, chemist and druggist, Consett.
Mr. John Gower, chemist and druggist, Llanelly.
Mr. E. W. Hardman, 80 Wellington Road, Leeds.
Mr. James Wood, chemist and druggist, Ilkeston.
Mr. A. Mander, pharmaceutical chemist, Malvern.
Mr. W. G. Wallace, chemist and druggist, Howden.
Mr. William Lee, chemist and druggist, Castle Northwich.
Mr. John Simon, chemist and druggist, The Cross, Chester.
Mr. E. M. Greensill, chemist and druggist, South Nor-

manton.

Mr. Joseph Watson, chemist and druggist, Bolton Road, Ramsbottom.

Mr. Thomas Needham, chemist and druggist, 56 Buxton Road, Huddersfield.

Mr. Arthur Wrigley, chemist and druggist, 9 Upper Accommodation Road, Leeds.

In last week's issue (page 255) it was inadvertently stated that Mr. Wilmot Hodge, of Birkdale (who acted as Mr. Charles Hare's solicitor), had been granted a licence. The licence obtained was for Mr. Hare.

The following applicants have been refused off-licences for the sale of wines and spirits:—

Mr. C. O. Buckley, Castleford.
Mr. H. C. Blanchard, Castleford.
Mr. A. W. Holmes, druggist, Wigston.
Mr. B. W. Kilvert, chemist and druggist, Crewe.
Messrs. Andress & Russell, chemists, Earl Street, Crewe.
Mr. Thomas Addison, chemist and druggist, Barnard Castle.
Mr. T. J. Oatley, chemist and druggist, Church Street, Adlington.

Mr. W. Holland, chemist and druggist, 207 Alfreton Road, Nottingham.

Mr. Thomas Needham, chemist and druggist, 58 Lidget Street, Lindley.

Mr. R. Widdowson, chemist and druggist, Arkwright Street, Nottingham.

Cocaine-purchasers.

The following notice has been issued officially to chemists in Torquay. We suppress names:—

Dr. — requests that the undermentioned be not supplied with the following: Morphine and cocaine. He generally obtains $\frac{1}{2}$ oz. of 15-per-cent. solution of each, as he is an *habitué*. —, age 19 years, looks 23 or 24, very tall (about 6 feet $1\frac{1}{2}$ inches high), slight, dark complexion, clean-faced, very well dressed, smart-looking, wearing pince-nez glasses, wearing check-cap, very high collar, thin features, receding chin and forehead.

We are also requested to notify chemists in Bristol and district not to supply cocaine or other powerful drugs to a young lady of good appearance, who is tall and pale. We may also impress upon all our subscribers in Great Britain that cocaine in any form is, strictly speaking, in Part 1 of the schedule of poisons, and may only be sold to persons known to the seller.

The Week's Poisonings.

The poisoning fatalities reported during the week number eleven. Laudanum was the cause of four, morphine, chlorodyne, and hydrochloric acid two each, and oxalic acid one. The laudanum-cases were at Nottingham (two), Manchester, and Hartlepool. The Manchester victim was a married woman who drank a shilling's worth of laudanum a day. Morphine was taken in overdose by Dr. Harrison, of Sheffield, and by Mr. E. J. Gregory, a leading Cheltenham dentist. A Crofton platelayer named Clarke drank 1 oz. of chlorodyne for bravado, and at the inquest on another chlorodyne-victim named Lyne, at Southampton, the jury added a rider to their verdict to the effect that chlorodyne should not be allowed to be sold in such large quantities. The Coroner (Mr. Cox-will) is to forward the rider to the Home Secretary. A

young married woman, named Cooper, living at Greet, poisoned herself with oxalic acid. An unknown man drank a fatal quantity of hydrochloric acid, and died in Eastville Park, Bristol, and a Hampstead shoemaker named Brown took the same poison. The acid was contained in a "stout" bottle, and the Coroner (Mr. Walter Schroeder) said he should like to know who sold the poison. The poison-label was a small one, and of nearly the same colour as a label describing the "stout" over which it was pasted. It certainly was a most careless act for anyone to sell a deadly poison in such a bottle.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Business Change.

The old-established business of Messrs. Mallen & Co., chemical-manufacturers, Dublin, has been taken over by Mr. George Gilbert, of Dublin. The entire works are being renovated, and provision is being made for a large increase in trade.

Personal.

At the last meeting of the directors of the Apothecaries' Hall of Ireland, Mr. A. R. Baines, conductor, sent in his resignation on account of failing health. This was accepted by the Board, who expressed their regrets. Mr. Baines has been with the Hall for seven years.

A Dispenser's Daily Work.

In a return issued by the Guardians of the South Dublin Union it is stated that during 1902 no fewer than 129,444 prescriptions were compounded by the six pharmacists attached to the district, or an average daily number of sixty prescriptions in respect of each compounder.

Company News.

It is announced in the *Dublin Gazette* that at an extraordinary general meeting of the Munster Drug Company (Limited), held at the registered office of the company, at 7 Pembroke Street, Cork, a resolution was passed and confirmed deciding to voluntarily wind up the company, and appointing Mr. F. W. Wynne, solicitor, 62 South Wall, Cork, as liquidator.

Enlarging the List.

The Belfast Board of Guardians have submitted to the the Local Government Board a recommendation that a wholesale price be fixed for all drugs and medicines outside the prescribed lists, so as to enable the contractor to compete on the same lines as those followed in tendering for the regular supplies of such articles.

The Londonderry Fire.

The Londonderry Magistrates have resolved to bring to the notice of the Royal Humane Society the gallantry displayed by Constable Casey, who, on the occasion of the recent fire in Prior's Medical Hall, entered the house, and carried Mr. Prior, who is a very old man, on his back through the burning building. But for the policeman's plucky act Mr. Prior would probably have been burned to death.

A Light Sentence.

At Rathmines, Dublin, on February 12, an aggravated assault was committed upon Dr. Alexander Gordon, L.P.S.I., of the Medical Hall, Ranelagh. From the evidence given in the Divisional Court it appeared that the assailant had taken action against Dr. Gordon, but his solicitor threw up the case, and he forthwith proceeded to "earn six months' gaol" on the doctor, whom he accused of certain wrongdoing, but which the latter characterised as an attempt to extort blackmail. The accused got off with a fine of 3*l*.

THE Island of Crete imported 15,498*l*. worth of drugs and chemicals during 1901, and the exports of similar products were valued at 41,450*l*. Olive and other vegetable oils were also exported to the value of 126,321*l*.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The Heather on Fire.

The Local Secretaries in Scotland were summoned to attend an immediate conference at 36 York Place, Edinburgh. It was held after the evening meeting there on Wednesday night, and was, of course, private. It was about the Pharmaceutical Society's Draft Pharmacy Bill, but the Poisons Committee's report was also discussed.

Money Left.

In the list of inventories of estates of deceased persons in Midlothian recently published in the *Scotsman* appear the names of the late Mr. James Paton (of Paton & Finlay, chemists, Edinburgh), whose personalty is put at 24,986*l.*; Mr. David Goodsir (proprietor of Goodsir's Eye Ointment, a well-known Scotch proprietary), 7,050*l.*; and Mr. George Hall (of G. & G. Hall, chemists, Edinburgh), 950*l.*

Edinburgh Chemists' Golf Club.

At the annual general meeting held at 36 York Place, Edinburgh, on February 10, the following office-bearers were elected: Hon. President, Mr. David Brown, F.R.S.E., F.I.C.; Captain, Mr. W. B. Cowie; Hon. Secretary, Mr. James Stott; Assistant Secretary, Mr. J. G. Robb; Hon. Treasurer, Mr. C. F. Henry; Committee, Messrs. H. D. Alexander, James Anderson, P. R. Beattie, A. S. Birnie, James Finlay, J. C. Laird, and George Robertson.

Business Changes.

Mr. D. McDougall, chemist, Elie, will shortly open a branch shop at Anstruther.

Mr. Wm. Munro, chemist and druggist, Scone, has closed his shop, and returned to Edinburgh.

Mr. H. M. Robin, chemist and druggist, has disposed of his business at Gorebridge, but continues at Newton Grange.

Mr. R. W. Barelay has succeeded Mr. W. S. Wilson, chemist and druggist, in the Spa Pharmacy, Well Street, Moffat.

Mr. Robt. S. Herd, chemist and druggist, has acquired from the trustee under sequestration the business of Mr. H. W. F. Allan, chemist, Kirkealdy.

Mr. R. J. Shennan, chemist and druggist, Dalbeattie, has acquired the business formerly carried on by Mr. S. Ewart, in High Street, Dalbeattie.

In last week's issue (page 287) and Coloured Supplement (page 66) we referred to the transfer of the historical business in Duke Street, Edinburgh. We note that in his circular to the public Mr. Thomas Barrou, of 1 Albany Street, Edinburgh, intimates that he has "acquired from Messrs. T. & H. Smith & Co., the retail business carried on by them at 21 Duke Street, Edinburgh, together with the prescription and other books used by them."

Dundee Notes.

On Sunday, February 15, a woman named Lyon was admitted to the Royal Infirmary suffering from the effects of poisoning. It appears that she accidentally swallowed a small quantity of liniment, and as her condition seemed to her friends to be very alarming it was thought advisable to remove her to the Infirmary. No serious results, however, are anticipated.

A link with the past has been broken by the death at Chester of Mrs. Hamilton (85), widow of the late Mr. Alexander Innes Hamilton, of Hamilton & Hardie, chemists, Dundee. The funeral took place in Dundee on February 13. Mr. James Russell, chemist and druggist, and Mr. Charles Kerr, pharmaceutical chemist, being present along with the family party.

Two members of the Scottish curling team, in the course of their tour in Canada and the United States, visited the factory of Messrs. Parke, Davis & Co., Detroit. An account

of the visit appears in a recent issue of the *Dundee Advertiser*, the writer stating that Dr. Kirk and he spent a most interesting time seeing the various departments of this vast concern, under the guidance of the manager, Mr. Holden, "who, I believe, is related by marriage to Mr. Mackay, solicitor, Dundee."

Glasgow Notes.

Influenza is again prevalent amongst chemists. Mr. C. T. Cockburn, of Cockburn & Co. (Limited), is one of the latest victims.

The wages of qualified assistants in local store chemists' establishments are rising. In some cases second-hands are getting from 50*s.* to 60*s.* per week.

Chemists starting business will have a good opening for bargain-making shortly. The fittings, &c., of one chemist's shop, and of quite a number of surgeries, are to be offered for sale.

Chemists here are adopting some curious side-lines. In one suburban shop there is a windowful of chamois-skins, and another innovator makes a special line of sauces and pickles.

In a local pantomime an erring husband, who is caught by his wife in the very act of taking a glass of beer from a barmaid, pleads that he mistook the young lady for a female dispensing chemist. When the low-comedy man "discovers" us we are indeed lost.

Local chemists are busy correspondents at present. Some are freely communicating their views on the excessive cutting of proprietaries direct to manufacturers, and others are educating their M.P.s as to the iniquity of the menaced subversion of the Poison Laws.

It is highly probable that Glasgow will supply a candidate for one of the forthcoming vacancies in the Council of the Pharmaceutical Society. The present feeling is that Scotland is under-represented. Mr. T. Maben's name has been mentioned, but Mr. W. L. Currie is likely to be the selected candidate.

The Committee of the Glasgow and West of Scotland Trades Association have sent a circular letter enclosing a petition, signed by about 850 chemists and proprietary vendors in Scotland, to all manufacturers of proprietaries whose goods are not protected in price. This should be a stimulus for lagging proprietors.

There are some significant facts which tend to prove that the cry of dull trade and poor profits is mostly meretricious. A chemist who lately desired to buy second-hand fittings and shop-rounds finds that such goods are almost unknown in the local market, and a bankrupt Scotch chemist or a Scotch annuitant on the Benevolent Fund are *rare aves*.

Glasgow chemists don't know where they are in the matter of "liable" and "non-lieable" labels. A medical-label printer who recently sent up a selection of stock labels, which were formerly passed, had them all returned marked "Liable." The following was one of these:—

Fluid extract of cascara. A new laxative. Recommended for its mildness and efficacy. Dose: As a tonic laxative, . . . As a purgative, . . .

The local scarcity of apprentices was nearly made greater the other day. One youth was in a hurry to get the damp fuel in the back-shop grate to kindle, and poured on some benzoline, which blazed up suddenly and ignited the contents of the bottle. The "young man in a hurry" made one of the most rapid exits on record, but fortunately the attendance of the fire-brigade was not required.

DUTY ON APRICOT-KERNELS.—A decision has been rendered by the Board of Classification of the United States General Appraisers, dealing with the classification of edible apricot-kernels. It was claimed by the importers that such kernels were free of duty under paragraph 548, or were dutiable at 1*c.* per lb. under paragraph 272, as nuts not specially provided for. Judge Waite, overruling the claims, holds that edible apricot-kernels, resembling the sweet almond in their taste, are dutiable at the same rate as shelled almonds—viz., 6*c.* per lb.—under paragraph 269 of the Dingley tariff.

French News.

(From our Paris Correspondent.)

BETTER LATE THAN NEVER.—Since the Paris daily Press published the paragraph about Emile Daurignac and his prescription, not a day passes without letters arriving at the Conciergerie Prison asking for details as to his wonderful stomach-cure. The latest was from a lady of 84, who has been a martyr to indigestion for seventeen years. She hopes M. Daurignac "will take pity on her hard lot, and by curing her enable her to pass happily the last years of her life."

PARIS SOCIETY OF PHARMACY.—At the last monthly meeting of this Society, M. Bourquelot, the General Secretary, drew attention to the fact that this year is the centenary of the Society's foundation. The first meeting of the Paris Society of Pharmacy was held on the 15th Thermidor, Year XI. (August 3, 1803), at which Parmentier occupied the chair. Fifty-five members were present, and the business of the meeting consisted in the drawing up of suitable regulations. M. Bourquelot suggested that the centenary should be celebrated in some suitable way, as it is a somewhat important date in the history of pharmacy. The proposal was accepted in principle, and it was decided to name a committee to carry the matter out.

JOURNALISTIC PRESCRIBING.—Medical subjects are frequently treated in the French daily Press. The articles usually allude to new discoveries, but sometimes take the form of familiar chats on subjects of general interest. Thus "Dr. Gregorie" writes in the *Journal* on the art of sleeping, and gives what would be called barefaced counter-prescribing, were it done verbally in a pharmacy. He says, "In real cases of insomnia one must not at once begin to take hypnotics, and above all the opiates." If this is done the victim will at length have to take enormous quantities of morphine, laudanum, sulphonal, and other unhealthy drugs to ensure some rest. In temporary sleeplessness chloral is the best and least dangerous drug to take where there is no heart-affection. One or two grammes is taken nightly in an infusion of lime-flowers. Bromide of potassium is used in the same doses and in the same manner.

THE INTERNATIONAL PHARMACOPŒIA.—At the weekly meeting of the Paris Academy of Medicine last Tuesday, a communication was read from the Minister of Public Instruction informing the Academy that as the result of the "International Conference for the Unification of the Formulæ of Heroic Medicines," held at Brussels last September, the Minister of Foreign Affairs has signed a protocol submitting the plan of an international arrangement to the Governments represented at the Conference. The Belgian Government has drawn up a project with a view to give the character of an international engagement to the resolutions contained in the document above mentioned. The Paris Academy of Medicine has now been asked by the Minister to study the project and give its opinion as regards the suitability of the arrangement proposed. A committee, composed of MM. Bourquelot, Brouardel, Marty, Pouchet, Riche, and Yvon, are to issue a report on the subject.

THE ALIMENTARY VALUE OF ALCOHOL.—The steady increase of drunkenness and its accompanying evils in France has led to a movement to promote temperance which has received a certain amount of official support. The Prefecturc of the Seine a couple of weeks ago warned Parisians, by placard, against the evil effects of alcoholic liquors, and in consequence the *Chambre Syndicale des Marchands de Vin* brought an action against the Prefect for damage done to their trade. Much interest is aroused in scientific circles by the question which will have to be decided as to whether alcohol is a food or a poison and the *Revue* has been taking the opinions of experts. M. Duclaux, the *Revue* says, appears to be justified, at least theoretically, in maintaining the alimentary value of alcohol and wine. Some of his *confrères* only contest the accuracy of his conclusions because they differ as to the correct definition of alimentary substances. If they only ascribe a nutritive character to substances that are capable of being absorbed by the organism and of reconstituting its tissues, then alcohol is not an aliment. If, on the other hand, they include among alimentary substances all those of which a

certain quantity can be assimilated without prejudice to its functions by the organism in which its combustion produces heat transformable into energy, then the *savants* are unanimous in considering that M. Duclaux's opinion is correct. The practical question is the quantity of wine and spirits useful, or at least innocuous, for the average constitution. M. Duclaux mentions a litre of wine per day, and Professor Joffroy would allow about three-quarters of a litre of wine containing 10 per cent. of alcohol. As to spirits, M. Duclaux considers that twelve to fifteen liqueur-glasses per day could do no harm, but then what he has in view is pure alcohol largely diluted with water. Dr. Lancereaux would permit a liqueur-glass of spirits after each meal. It should be taken on a full stomach, as then it loses its corrosive character.

Colonial and Foreign News.

THE PORTUGUESE PHARMACOPŒIA.—The Minister of the Interior has appointed a committee to revise the Portuguese Pharmacopœia which has been used for twenty-seven years without any alterations having been made in it.

CHEMISTRY IN ROME.—A chemical association has been formed in Rome with the object of founding a large Italian chemical society. Professor Stanislaw Cannizzaro was appointed President, and Professor Emanuele Paterno Vice-President.

PHARMACEUTICAL SPECIALITIES IN PORTUGAL are, by a decree dated November 27, 1902, to bear a stamp of the value of 50 reis in the case of foreign specialities and mineral waters. For home-made specialities the stamp is to be of the value of 10 reis.

A NEW PHARMACY COLLEGE.—The formal opening of the new Brooklyn College of Pharmacy building took place on January 19. The college was open to inspection after 3 P.M., and was visited by a large number of people. There was a reception in the evening.

MESSRS. FITZSIMMONS & GLEESON, importers and exporters of drugs and chemicals, 59 and 61 Maiden Lane New York, have admitted into partnership Mr. A. P. Hamilton and Mr. James S. Schneider. The style of the firm has been changed to Messrs. Fitzsimmons, Gleeson & Co.

QUACK SENTENCED.—The trial of the quack doctor, Norden Koetter, who made 15,000*l.* a year by selling worthless decoctions to his numerous dupes throughout Germany, has just concluded. Koetter took to flight, and in his absence he has been condemned to three years' imprisonment, a fine of 150*l.*, and loss of civil rights for five years. The chemist Kresper was acquitted, but Dr. Kronheim, for acting with Koetter, was condemned to a year's imprisonment, and loss of civil rights for a year.

SCARLET-FEVER SERUM.—Much interest is being taken in the results obtained by Professor Adolf Baginsky, of Berlin, in the treatment of scarlet fever with antistreptococcus serum. The serum discovered by Aronson has been tried in the Kaiser and Kaiserin Friedrich Hospital for Children with the following results. In 1895 the mortality from scarlet fever was 34 per cent., in 1896 it was only 12.04 per cent., in 1899 34.15 per cent., in 1901 20 per cent., and in 1902 17 per cent. These figures, Dr. Baginsky says, prove that the infection of scarlet fever varies in malignancy, and thus afford no certain measured results for the serum. He thinks, however, that the antistreptococcus serum offers the medical world a weapon with which effectually to combat an epidemic of scarlet fever.

GENERAL CHEMICAL COMPANY (LIMITED).—The annual report of this New York company, issued on February 3, shows net profits for 1902 of \$1,537,551. From this amount there was deducted \$30,000 for fire-insurance reserve, leaving \$1,507,551, which was carried to surplus account. The surplus on hand at the beginning of 1903 was \$1,238,437, making the total book-surplus \$2,745,988. From this amount there was deducted \$861,372 for preferred and ordinary dividends, and \$269,143 was written off for depreciation account, leaving a net surplus on hand at the close of 1902 of \$1,615,473.

PERFUMERS MEET.—The ninth annual meeting of the Manufacturing Perfumers' Association of the United States took place in New York on February 5 and 6. Mr. James E.

Davis, of Detroit (President of the Association), presided. The topics discussed included Customs matters, trade-marks, reciprocity, competition of foreign perfumes, and other subjects. On the evening of the second day members of the Association and their guests attended Daly's Theatre, and afterwards had supper at Delmonico's.

Trade Notes.

MESSRS. ECKERSLEY & SONS, 214 Queen Street, Melbourne, advertise in this issue for a London agent for the "Black-fellow" brand of eucalyptus oil.

"DO IT NOW," printed in white letters on a black ground, is a useful desk-card intended to promote the business interests of the Carlton Import and Export Company, 155 Fenchurch Street, E.C.

THE SPECIAL CHRISTMAS NUMBER of *Faulding's Medical Journal*, published by Messrs. F. H. Faulding & Co., wholesale druggists, of Adelaide, Perth, and Sydney, contains a well-executed coloured print of "The Dog in the Manger" from the picture of Mr. Walter Hunt in the Gallery of British Art.

FOR INHALATION.—There have been several inquiries from our subscribers recently regarding Dr. John Francis Churchill's inhalation for diseases of the respiratory organs. As will be seen from our advertising columns the agency for this well-known remedy—now called "Spirone"—has been obtained by Mr. D. T. Davies, of 108 Fortune Green Road, West Hampstead, N.W.

WINDOW-SHOWS.—The increased popularity of Wright's Coal-tar Soap, owing to its protection through the P.A.T.A., has brought to Messrs. Wright, Layman & Umney (Limited), Southwark, S.E., a big demand for window-displays, and we learn that they are prepared to assist retailers by sending showcards, dummies, and other window-attractions with any orders that they receive. We observe that the firm have recently started an express delivery tricycle which has upon it two huge models of cakes of the coal-tar soap, each model being able to hold as many as twelve Winchester quart bottles.

HALL'S WINE.—A pretty new showcard has just been issued to advertise this popular preparation. The subject is a picture in colours of the head and shoulders of a young woman, the advertising matter being limited so as not to destroy the effect of the picture. The card is 19 by 25 inches, and is brilliantly finished with a gelatin surface which is easily cleaned with a damp sponge. Chemists needing copies of the showcard should communicate with Messrs. Stephen Smith & Co. (Limited), Bow, who have also new designs in paper slips which are suitable for window spaces.

JUJUBES AND SPECIALITIES.—Printed in clear bold type on surface paper and profusely illustrated, the new catalogue and price list of Meggeson & Co. (Limited), of Miles Lane, Upper Thames Street, E.C., is sure to command attention. Of course, lozenges, jujubes and cachous, which have made the fame of Meggeson's, predominate in every variety, and there are many new designs in medicated pastilles to suit fastidious customers; but capsules, essential oils, perfumes and confectioners' sundries also take up considerable space for their illustration and descriptions. Chemists who have not Meggeson's list should write for one.

FOR INVALIDS.—A series of food specialities for invalids has been submitted to us by Telma (Limited), of 57 Fenchurch Street, E.C. They include a pre-digested cocoa containing 71 per cent. of carbohydrates and 20 per cent. of proteids, an invalids' food (carbohydrates 75 per cent. and proteids 17 per cent.), the cocoa preparation being a mixture of dextrinised cocoa with the food, and Telma biscuits. The latter are not of the usual tasteless variety, and the food and cocoa are each agreeable to assimilate. The Telma products are indicated in cases of weak or impaired digestion, and are said to have proved valuable in cases of gastric troubles. The biscuits are sold in 1 lb. and 2 lb. tins at 1s. and 1s. 11d. per tin; Telma invalid food sells at 1s. 7d. per 1-lb. tin with correspondingly reduced prices for larger sizes; and the cocoa is 6d. per ¼-lb. packet, and 2s. per 1-lb. tin. These are to be sold at face-prices, as the proprietors discontinue cutting.

Business Changes.

MESSRS. MILBURN (LIMITED), Cash Drug-stores, Whitefriargate, Hull, have taken over the business of Mr. W. H. Hooton, chemist and druggist, at 186 Spring Bank, Hull.

BOOTS CASH CHEMISTS (SOUTHERN) (LIMITED) have acquired the old-established business, at 18 Moorfields, E.C., carried on for many years by Mr. James Ockenden, chemist and druggist.

MR. D. T. EVANS, chemist and druggist, has made considerable improvements in his pharmacy at 1 High Street, Margate. The small windows have been replaced by large plate-glass panes.

MR. H. A. GIBSON, chemist and druggist, of Bridge Street, Spalding, has disposed of his business to Mr. W. A. Shephard, pharmaceutical chemist, of Hammersmith, who served his apprenticeship in Spalding with the late Mr. Shadford.

MR. SIDNEY SMITH, chemist and druggist, of 2 Cambridge Gardens and 1c Elphinstone Road, Hastings, has purchased the prescription books connected with the business lately carried on at Robertson Street, Hastings, by Mr. Heaton.

MESSRS. N. W. ROBSON AND T. B. ROWELL, chemists, have acquired the business, at 15 Fore Street, Hexham, so long carried on by the late Mr. George Richardson under the style of Richardson & Co. The new proprietors will continue the business under the old title.

MR. F. W. JACKSON, chemist and druggist, late of Ashton-under-Lyne, has purchased the business formerly carried on by Warhurst (Limited) at 87 Walton Road, Liverpool. Mr. Jackson has made considerable alterations and redecorated throughout, bringing the premises into the first rank of modern pharmacies in the city.

Personalities.

MR. A. FERNLEY, chemist, Burslem, has been appointed Local Secretary for the P.A.T.A.

MR. G. F. BRIMSON, chemist and druggist, has been appointed sub-postmaster of the Station Road Post-office, Addlestone.

MR. JOHN HENRY BELL, chemist and druggist, of Stapleford, has been elected to fill a casual vacancy on the Nottinghamshire County Council.

MR. S. L. HUSKINSON, formerly in business as a chemist at Nottingham, lectured on "Photography in Natural Colours" to the members of the Chichester Photographic Society on February 17.

THE Philadelphia College of Pharmacy has conferred the degree of Master of Pharmacy upon Mr. Henry S. Wellcome, of Messrs. Burroughs Wellcome & Co., who with his late partner graduated at the College before coming to England.

MR. W. G. TAPLIN, chemist and druggist, who carried on business at 91 Hampstead Road, N.W., for thirty years, and had to give it up three years ago owing to an attack of glaucoma, has this week entered Moorfields Eye Hospital, where Mr. Marcus Gunn is to perform iridectomy, with the hope of saving the vision of one eye.

It is understood, says the *Times*, "that Mr. R. A. Robinson will be nominated by the Conservative members of the London County Council for the position of Deputy Chairman on March 10." Should this be so, Mr. Robinson will probably be prevented from accepting the Presidency of the Pharmaceutical Society—an appointment which was generally regarded as a foregone conclusion.

MR. G. CLARIDGE DRUCE has been co-opted on the Council of the Oxfordshire Architecture and Historical Society; this year he is President of the Nottingham Natural History Society, Treasurer of the Ashmolean Oxfordshire Natural History Society, and Secretary of the Oxfordshire Archaeological Society. At the last meeting of the Ashmolean Society, Mr. Druce gave an account of the "Ruskin Plot" of land at Cothill, presented to the Society by Mr. Willett, of Brighton.

Pharmaceutical Society of Great Britain.

NORTH BRITISH BRANCH.

EVENING MEETING.

THE fourth evening meeting of the session of the North British Branch was held at 36 York Place, Edinburgh, on February 18, Mr. Peter Boa (Chairman of the Executive) presiding.

Mr. RUTHERFORD HILL read Mr. Martin Meldrum's paper as under, and at the close intimated that Mr. Meldrum had written stating that he was suffering from influenza, and had not, therefore, been able to complete and give the result of his experiments with *nux vomica*.

PURITY OF DRUGS.

The author said "pure drugs" is the watchword of the qualified pharmacist, and the proprietors of modern stores, although they sneer at the claims of pharmacy to professional rank, dare not, while bringing cheapness into special prominence, relegate purity to the background. In the purity of drugs three parties are interested—the prescriber, the dispenser, and the patient. If the drugs which the medical man prescribes are not pure he might get different results from those which he anticipated. The life of the patient might be endangered or sacrificed, and the practitioner's reputation might suffer. The physician will always have constitutional idiosyncrasies and complications of symptoms to combat, and it is desirable that his work should not be further complicated by having differences of potency in the drugs he uses. All standardisation must have therapeutic uniformity in view. To obtain it is, as might be noted from recent discussions, a task calling for much arduous and patient research. With regard to the interest of the patient, it is generally the case that when a man calls in a physician he sends for what he considers the most skilful practitioner, not the cheapest he can find. But after the physician has prescribed for him, when he comes to want his medicine made up he ceases to be dominated by the desire to have the best and consequently the safest at his command, and follows what he considers the sound business principle of buying in the cheapest market. That this is ever a good principle, although a very natural impulse, is doubtful. In the matter of drugs the cheapest is the most dangerous; and once the general public has grasped that fact, which is at present recognised by too small a minority, the position of the trained pharmacist will be rendered more secure. Considering next how the question affects retail pharmacists, Mr. Meldrum said purity in drugs and accuracy in dispensing are the two main props on which their claim to a professional status rests. How far at present is it possible for the pharmacist to guarantee from his personal knowledge freedom from impurities of the drugs he handles? and to what extent is the possibility fulfilled? His training places him in a position to detect impurities or adulteration in entire drugs with readiness and certainty. For the larger leaves, roots, &c., a little careful examination with the naked eye should be sufficient to acquaint anyone with a knowledge of *materia medica* of the presence of any adulterant. For powdered drugs—vegetable, animal or mineral—the microscope forms a ready and reliable means of detecting impurities and determining to some extent the quality of the drugs. Mr. Meldrum went on to give the results he has obtained from the examination of several chemical drugs in powder with the view of determining the practical value of the microscope.

Alum.—In two only of several samples was there any appearance of foreign matter, and that appeared to be due to dust, most probably of atmospheric origin.

Borax.—One sample, invoiced as "fine silky," was softer to the touch than the others; the crystals were much more uniform and regular in appearance, and many of them showed clean-cut triangular facets.

Cream of Tartar.—A marked difference in the samples was noticeable. In two samples of inferior quality the crystals were opaque, broken, and irregular, and there was present a considerable mass of small fragments so minute that it was difficult to say whether they were crystalline or

not. In this instance the microscope seemed to form a reliable test as to quality.

Bicarbonate of Soda.—The best grades were readily distinguishable by the uniformity of the longish hexagonal crystals, which were transparent and well formed. In the inferior grade they were more irregular and opaque, and there were present particles of doubtful crystalline origin. The inferior grades of cream of tartar and sodium bicarbonate, when tested against the superior qualities, were found deficient in neutralising effect.

Rochelle Salts.—No practical difference was noted in any of the samples looked at. The characteristic composite crystals were clearly seen in all.

Tartaric Acid.—All the crystals under the microscope bore much the same appearance as the commercial crystals did to the naked eye.

Black Pepper.—Of two samples, the first, of a fine quality, showed a large proportion of starch-granules with pieces of cortical tissue observable here and there. In the second, of much inferior quality, fewer starch-granules and more cortical tissue were seen. There was also present a considerable quantity of wool-fibre. The flavour and aroma of the second were much inferior to those of the first.

White Pepper.—Of three samples, one showed a much coarser-looking powder than the others, but no foreign substance could be detected.

Pimento.—In two samples, both of good quality, less starch was observable than in the black or white pepper, and there was a greater preponderance of fibrous tissue. Portions of the testa of the seeds were plainly discernible.

Hellebore.—A specimen was examined to compare its appearance with pepper, but under the microscope little resemblance was seen. Starch-grains were present, but the large proportion of woody and cortical tissue indicated it to be of different origin from pepper.

Powdered Rhubarb.—In all the samples examined the small starch-granules were readily observed. There was more cortical tissue in the cheaper grades than in the finer qualities, the cortex in the former having evidently been less carefully removed. In two samples crystals of calcium oxalate were detected, and experiments demonstrated that the inferior qualities yielded slightly more calcium oxalate, on treating the ash with dilute hydrochloric acid, neutralising, and precipitating with potassium-oxalate solution, than the finer qualities. He would not like to say that that should be taken as a reliable criterion.

Turmeric.—A microscopic examination of a sample, compared with rhubarb, to some samples of which it bore a superficial resemblance, resulted in the aspect of the large starch-granules at once dispelling doubt and testifying that adulteration with this drug would be effectively detected.

Ginger.—The results of examination were similar to that in rhubarb. The starch-granules in ginger formed a very reliable test as to its presence in a compound powder like Gregory's mixture.

Belladonna-root.—Two out of three samples had a collection of woody and cortical tissue, with a fair proportion of starch-granules. A larger proportion of starch-granules was noticeable in the third, some of which looked like liquorice-starch, indicating adulteration with powdered liquorice. Verification by infusion produced a flocculent brownish-white precipitate, presumed to be glycyrrhizin. A similar infusion of pure powdered belladonna-root yielded no precipitate.

Liquorice-root.—Two samples exhibited a large proportion of the characteristic liquorice-starch, and the long vascular fibres were readily distinguishable.

Scammony-resin.—One sample appeared pure, the other contained an undue proportion of fibrous material.

Scammony, Virgin.—Two samples examined were apparently pure. When the microscope was sharply focussed on it by artificial light, the body of the grain was dark, whilst a small clear spot showed up in the centre. In other starches the whole grain was more or less translucent.

Colocynth-pulp.—Of four samples, one showed a fragment of the seed, indicating that the pulp previous to powdering had not been properly freed from seed.

Colocynth.—The presence of a fair proportion of starch-granules in one sample was accounted for by the firm who supplied it following their custom of extracting the seed and replacing them by wheaten flour.

Opium.—In the first sample of powdered opium, there was some extraneous fibrous matter. The second was a pure specimen of dried latex. The third, although showing some foreign crystalline substance, had the requisite percentage of morphine.

Jalap.—One sample indicated the presence of rice-starch. Very little woody matter was present in this drug. Under the microscope, starch and resin cells constituted the greater proportion of what might be observed.

Boric Acid.—The only variation detected in three samples was a slight difference in the size of the crystals, which varied considerably in size in the same sample. Not a few of them covered almost the entire field of a high-power microscope.

Mr. Meldrum then discussed the question of standardisation, and said that most of the work in this direction had been done by men in large manufacturing establishments. But if the retailer allowed the process of standardising and the suggesting of legal and medicinal standards to pass into their hands, what would be his position in a few years? He would simply become a retailer of this or that company's standardised fluid extracts, &c. Would his knowledge of the potency of the drug be confined to the percentage placed by the wholesale firm on their label? If so, would his education not have been in vain; and if his education was not to be allowed to become so much useless lumber, what steps should be taken to place pharmacy in such a position that the pharmacist would have an opportunity of increasing that knowledge which he had already obtained and putting it to practical use to the ultimate gain of himself and the public? There was no reason why pharmacists should not standardise their own preparations and check the assaying of those they purchased from wholesale sources. Mr. Meldrum next referred to processes of assay, which should be as simple as possible. Mr. Dott's modification of the official process for standardising opium was a step in the right direction.

Mr. Dott agreed with Mr. Meldrum regarding the value of the microscope in the preliminary examination of a substance. It was scarcely necessary to allow the solution to stand with potassium ferrocyanide for six hours in estimating nuxvomica: three hours he thought was sufficient. He was glad that Mr. Meldrum approved of his (Mr. Dott's) modification of the official process for the estimation of opium. The official process was very much better than that of some other Pharmacopœias. In the Pharmacopœia Japonica, though it was a moderate book, the process was very defective. Mr. Meldrum had touched on one of the difficulties of standardisation—namely, the want of or uncertainty as to pharmacological information regarding active principles. Some years ago, at a conference, Professor Leech dealt with jaborandi and its two alkaloids, which were said to be antagonistic in their action, but it was now said they were not so. Mr. Dott also referred to changes of opinion which had taken place regarding other drugs, which went, he said, to show that the fundamental difficulty regarding standardising was that there was no finality among pharmacists on the subject, and which made one a little sceptical as to results.

Mr. THOMAS STEPHENSON thought that standardisation was the question of the hour among pharmacists; but he was inclined to think it was being carried a little too far, because he thought it was not wise to standardise until they knew thoroughly what was the precise action of the active principle. Some years ago in India it was discovered that de-emetised ipecacuanha was as efficacious in dysentery, and had not the nauseating effect of the original drug, and a medical man requested him to prepare a sample of it. He did so, and gave it to this medical man and several others, and they confirmed without a doubt the action of the de-emetised ipecacuanha as being exactly the same as that of the pure drug.

The second paper was by Mr. A. Russell Bennet, F.C.S., on

COMMERCIAL SAMPLES OF PODOPHYLLUM RESIN.

He said that during the past two years it had been from time to time brought under his notice by chemists and others that in making tincture of podophyllum resin B.P. the resin did not nearly all dissolve, although it was distinctly stated under the characters of

Podophyllum resin as follows: Soluble, or nearly so, in alcohol 90-per-cent. . . partly soluble in ether. It should not yield more than 1 per cent. of ash upon incineration.

After going into the history of the plant till its introduction into the B.P. in 1861, the author said the methods of preparing the resin had varied from time to time. Some manufacturers seemed to have a preference for precipitating with alum-solution; others for water acidulated with hydrochloric acid; while others preferred exhausting with weak soda, and precipitating the resin in water acidulated with sulphuric acid. He then proceeded to give the results of an examination of ten samples of the resin, with a view to ascertain how far the commercial varieties corresponded with the B.P. characters. As tabulated they were as follow:—

No.	Source	Solubility in 90- per-cent. Alcohol	Solubility in Ether	Ash Per- centage	Colour
		Per cent.	Per cent.		
1	British	80	77.5	2.31	Orange
2	Foreign	84	76.2	2.73	Yellow
3	Foreign	90	73.1	2.90	Pale yellow
4	British	93	71.52	2.10	Pale orange
5	British	95	73.0	0.75	Pale orange
6	Foreign	90	70.0	1.43	Pale orange-brown
7	Foreign	94	68.0	1.64	Deep yellow
8	British	88	69.0	1.90	Orange-brown
9	British	90	74.0	1.39	Deep orange-brown
10	British	86	76.0	1.75	Orange-brown

These results proved that a resin of podophyllum soluble, or nearly so, in alcohol 90-per-cent. was not a plentiful article in the market. He was not prepared to say there was not one, but he was certain there was not one in the ten samples he had examined which could accurately answer the characters of the B.P. From experiments he was of opinion that the heat used in drying the resin and exposure to the air while being dried had a very strong action upon it by oxidising part of it and rendering it insoluble.

In discussing Mr. Bennet's paper, which was also read by Mr. J. R. Hill, Mr. DUNCAN said he had made podophyllin by the 1885 process, but found that the precipitation was too slow, and that an emulsion was formed which took long to separate. It was much easier to make it by the 1893 process, by which he had no difficulty in getting a yellowish powder perfectly soluble in 90-per-cent. alcohol. There could be no doubt that the solubility depended on the atmosphere in which the resin was dried, and to obviate insolubility the B.P. fixed a temperature of 70° F., and thus oxidation was avoided. The amount of ash in Mr. Bennet's samples was excessive. It would be better, until the podophyllotoxin was introduced, to call it extract of podophyllum rather than resin, as in the case of extract of euonymin. The official resina podophylli was certainly a mixture. He was amazed at Mr. Bennet's results, because this subject was discussed there many years ago, on an occasion when Mr. Bennet read a paper in which he stated that one sample contained as much as 87 per cent. of alumina, and another 27 per cent. of sodium sulphate. If they gave a decent price, he thought they would have no difficulty in getting a resin to satisfy the B.P. requirements.

Mr. MCDIARMID and Mr. MCGLASHAN having spoken, Mr. HILL replied.

CHEMIST POSTMASTERS.—The *Sub-Postmaster*, the official organ of the National Federation of Sub Postmasters, devotes space to the circumstances of the resignation of Mr. Frederick Gibson of the postmastership of the Gooch Street office, Birmingham, to which reference was made in the *C. & D.*, January 17. Mr. Gibson has a smart advertisement on the front page of that journal, in which he offers packed goods as a sideline to sub-postmasters.

CALCIUM-CARBIDE DANGERS.—Dr. J. C. McWalter, Dublin, calls attention in the *Lancet* to the danger, from a public health point of view, to persons who are compelled to handle calcium carbide. The violent chemical action which takes place when calcium carbide comes in contact with any mucous surface suggests that some protection for workers with the chemical is imperative. These reflections were induced from the ill-effects on a lad who came to the doctor for treatment.

Winter Session.

Royal Institution.

THE discourse on February 13 was by Professor SHERIDAN DELÉPINE on "Health-dangers in Food." Reference was made to arsenical beer, oysters polluted by sewage, the Derby pork-pie poisoning-cases, and the preservation of food by chemicals. Professor Delépine expressed the opinion that the Government should require "a certain amount of knowledge on the part of those who prepare food."

The exhibits in the library included Bird's spirit-recovery still and his improved Gutzeit apparatus for the detection of arsenic.

Chemical Society.

AT the meeting held on Wednesday afternoon, February 18, the chair was taken by the President, Professor Emerson Reynolds, F.R.S. After the minutes of the previous meeting had been read, the PRESIDENT announced that the Council had selected Dr. Tilden as President of the Society for the ensuing year, whilst Mr. Horace Brown was proposed as Treasurer, and Professor W. P. Wynne, F.R.S., as Junior Secretary. Professor Dunstan, F.R.S., who has resigned the senior secretaryship, is to be a Vice-President, as is also Mr. David Howard. A ballot for the election of Fellows was held in the course of the evening, and among those elected were Mr. G. T. Branch, formerly of the Metropolitan College of Pharmacy, Mr. D. J. Williams, now Demonstrator in Chemistry at the same college, and Mr. F. H. Lees, of the Wellcome Chemical Research Laboratories. We reserve the rest of our report until next week.

Optical Society.

THE annual meeting of the Optical Society was held at 20 Hanover Square, W., on February 16. The report of the Council, which was there presented, shows that the total membership at the end of 1902 was 207, compared with 227 at the end of 1901. Reference was made to the annual dinner held in Birmingham in July last, and to the Optical Standards and Educational Committees. Members of the optical trade have contributed 107*l.* 2*s.* to the support of the optical classes at the Northampton Institute. The accounts for the year show that 192*l.* 3*s.* was received for members' subscriptions, and that the invested funds and cash at the end of 1902 amounted to 182*l.* 12*s.* 7*d.*

The report was adopted, and the accounts were passed, after which Dr. C. V. Drysdale, of the Northampton Institute, was elected President for the ensuing year. An illuminated address was also presented to Mr. W. Salt for his services to the Society as Secretary.

Chemists' Assistants' Association.

A MEETING was held at 73 Newman Street, W., on February 12, presided over by Mr. A. Latreille. Mr. R. E. LOWNSBROUGH, the Recorder in Botany, having made a few interesting remarks upon thymol-producing plants, the PRESIDENT called upon Mr. W. S. Glyn-Jones to read his paper on

THE SALE OF FOOD AND DRUGS ACTS

as applied to drugs. Mr. GLYN-JONES, in the course of his introductory remarks, said that a perusal of the Acts suggests that the introduction of drugs was an afterthought to the framers. Sections 6 and 7 of the 1875 Act are those under which charges are usually brought against chemists, but there is nothing in the Act to show how the Court is to arrive at a decision as to what is the nature, substance, and quality of the article demanded, or of the compounded drug or its ingredients. In the original Act nothing was said about standards for food or drugs, but now the Board of Agriculture have power to set up *prima-facie* standards for milk, cream, butter, or cheese, and they have already done so for some of these articles. The absence of standards constitutes a great difficulty in the administration of the Act, but the last High Court decision on the subject of standards for drugs goes a long way towards making the B.P. the official

standard. Mr. Glyn-Jones commented upon this, his remarks being substantially similar to those he submitted to the Pharmaceutical Society in December. Then he spoke of prejudice sales, saying that the purchaser is not prejudiced if, at the time he purchases, he is made aware of the fact that he is not getting what he asked for. This may be done verbally, or by notice put up in the shop, or by a label distinctly printed or written to the effect that the article is mixed. In the recent mercury-ointment cases, the Magistrate holding that, as the label was covered up with opaque paper, the label used to indicate that the ointment was diluted did not comply with the section, Mr. Glyn-Jones hoped that decision will not be accepted without appeal. He then referred to the protection afforded by a warranty. A warranty only makes wholesalers responsible for the condition in which they supply an article. The onus is upon the retailer to prove that he sold the article in the same condition as he received it. A chemist who desires a warranty with his goods should be prepared to show that it was part of his contract with the wholesaler that the goods should be so warranted, and should then have an invoice, or something in writing, from the wholesaler, showing that it was intended that a warranty should apply to the goods and that they were not sold by description only. Having referred to the sampling of foods in course of delivery, Mr. Glyn-Jones said there is no real definition in the Act of the term "drug," except that the term includes medicine "for internal or external use." High Court decisions do not help very much on this point, unless it is that they show that the question is one of fact for the Magistrate in each case, and that it does not follow that once a drug always a drug. He then touched on administration of the Act, and, speaking of public analysts, said it is unsatisfactory that the fee paid to the analyst (10*s.* 6*d.* per sample) is not remunerative when articles requiring much work are submitted for analysis, and it may account for the purchase of vinegar of squill to test for acid strength or magnesia to test for carbonate. He also protested against Sale of Food and Drugs Acts cases being taken in the Magistrate's court. It often happens that expert witnesses (engaged at, say, ten or twenty guineas each), lawyers, and barristers are kept waiting whilst the over-night drunks and other charges are dealt with. Lawyers and those who habitually attend courts have also little conception of the degradation felt by the chemist of honourable position in his town when he is herded with the average police-court crowd, waiting his turn to answer a charge of selling deficient spirit of nitre. Whatever the fine may be the punishment suffered by that chemist is out of all proportion to the seriousness of the crime. With the growth of legislation upon the lines of the Sale of Food and Drugs Acts there has arisen the need for special courts of first instance to deal with these cases, and Mr. Glyn-Jones felt that specialists in the subject should be associated with the Judges, as in the Admiralty Court.

DISCUSSION.

The PRESIDENT led this off, and he was followed by Mr. FFOULKES, Mr. BRITTON, Mr. GOODALL, Mr. PICKERING, Mr. C. MORLEY and Mr. GARSED. The proceedings terminated with a vote of thanks to Mr. Glyn-Jones.

Western Chemists' Association.

AT the meeting held on February 18, at the Westbourne Restaurant, eighteen members were present. Owing to the absence of the President and the Vice-President through illness, the chair was taken early in the evening by Mr. H. Cracknell, and afterwards by Mr. W. F. Gulliver.

PERFUNCTORY FORMALITIES

were the subject of discussion, Mr. R. H. JONES initiating it. He began with the following by-law of the Pharmaceutical Society:—

All persons shall, at the time of giving notice of intention to present themselves for the Minor examination, satisfy the Registrar that they have attained the full age of 21 years, and have been registered as "Apprentices or Students," and that they have for three years been practically engaged in the translation and dispensing of prescriptions.

The principle, Mr. JONES said, here enunciated is not logically carried out, and it should be amended. In the instructions

to candidates the obligations are repeated with a curious difference. There the candidate is requested to produce "a certified declaration that for three years he has been registered and employed as an apprentice or student, or has otherwise for three years been practically engaged in the translation and dispensing of prescriptions." The acceptance of this certificate is a mere paper formality of the most perfunctory kind, for there is no case on record in which the accuracy of the declaration has been challenged. The Registrar is not to blame, but Mr. Jones blamed the seeming passivity of the Council for allowing such a formality to exist. It is a well-known fact that candidates can and do evade the conditions, and chemists and physicians sign the declaration in a most perfunctory manner. Mr. Jones knew four instances where declarations had been accepted from candidates who had never been engaged either in pharmacy or in dispensing. Mr. Jones gave details of cases, and added that such candidates could not possibly have any knowledge of practical pharmacy in which so large a percentage of failures occurs. Practical courses at the Schools are a poor substitute for actual work in an adequate pharmacy. Mr. Jones suggested that the hybrid committee on Education and Examination which Mr. Newsholme introduced some six or nine months ago should give signs of vitality and look into the question of training. Such a body was more competent than any other to investigate the relationship now existing between the means for practical training and the standard of examination, and would readjust such details as may have become disturbed. Mr. Jones also said that the term of pupilage should be shortened to twelve months' actual work in an approved pharmacy, dispensary, or dispensing laboratory. This might entail an official inspection, but that would be better for the schools and better for examiners. His final suggestion was as to altering the by-law to ensure an interval of three years between the registration as a student and entry for the qualifying examination. He suggested that the first year be spent in practical and theoretical pharmacy, the second year in chemistry and physics, and the third year to materia medica and botany. It is better to have moderate conditions of entry strictly conformed to than a parade of stringency, which is a mere fiction. Surely no obligation is so important as that which has for its object the exclusion from qualification of the imperfectly trained student.

The CHAIRMAN (Mr. Cracknell) agreed with Mr. Jones that there are discrepancies in the carrying out the by-laws. Employers know that pharmacy is overrun with assistants whose practical knowledge is *nil*. He liked Mr. Jones's idea of shortening the term of pupilage and fixing a period of practical training.

Mr. J. F. HARRINGTON said the ideal training for a student was three years in a good-class pharmacy. Mr. Jones's idea of one year in a good school or dispensary would be of much value to a country lad.

Mr. E. WHITE said the examiners find a lamentable lack of actual knowledge of the technical part of pharmacy among candidates. He thought such practical training as is required is nowadays not easily obtained, as the bulk of the chemists' shops of the present day are not carried on in such a way as to make them a training-ground for students. He would not insist on three years being actually spent in the translation and dispensing of prescriptions. As a member of the Education Committee referred to, he was able to say the committee had not yet met, owing, he believed, to some objections from the other side of the Tweed. So far as Bloomsbury Square is concerned, he could say they were entirely in sympathy with Mr. Jones's views. Some modification of the present system of training is undoubtedly required. "Candidates are signed up, present themselves for examination, and sometimes pass," said Mr. White; "we can't help that. (Laughter.) We do our best, and the figures speak for themselves, I think—(much laughter)—but we can't help passing them sometimes." Compulsory inspection of schools would doubtless be a good thing, but there is no power to do so under the present by-laws, and he questioned if it could be obtained.

Mr. C. H. F. WOOLLONS suggested that the by-law might be altered so that no certificate would be accepted unless indentures of apprenticeship were produced, and afterwards a period of training in a good dispensing-school or dispensing-business should be insisted on. He thought those chemists

who so light-heartedly signed declarations to the Registrar would draw the line at manufacturing indentures.

The CHAIRMAN said training in actual pharmacy is really what is lacking.

Mr. A. C. WOOTTON said Mr. Jones's paper required careful reading. As far as he could gather the main point was that the stipulation in the by-law is not carried out by the Registrar. The carrying-out of the requirements of that by-law would be attended with considerable difficulties, he imagined, although he agreed that it is next to useless to have a by-law which led to no practical purpose. He presumed, however, that the great majority of youths who pass the examinations have had a fair training in pharmacy—they succeeded in satisfying the examiners, at least. He, however, had always believed much more strongly in the value of a good practical training than in any number of examinations.

Mr. E. W. HILL did not think Mr. Jones had proved his point. The instances he brought forward formed only a very small portion of the whole.

Mr. GULLIVER (who was now Chairman) thought there would be a difficulty in picking out the dispensing pharmacies to be "approved" for Mr. Jones's year of training.

Mr. HICK agreed. He did not desire to be one of the "approved."

After some further remarks from Mr. WHITE, Mr. JONES replied briefly.

A University Curriculum.

FOR PHARMACISTS.

MR. WILLIAM KIRKBY, F.L.S., in the paper which he read to the Manchester Pharmaceutical Association last week, recognised fully that all retailers in the drug-trade do not require the high qualification involved in a university curriculum. He said, however, that a time is coming when, for various reasons (especially the more onerous professional duties of medical practitioners), there will be a greater call for higher training in pharmacists than there is now, so that a section, at least, of pharmaceutical practitioners should be prepared to meet the demand. The first essential in that regard is, he considered, an adequate training such as that here outlined for a degree in science, independent of the Pharmacy Act qualification, but supplementary to it. The course is such as may be provided by Victoria University:—

FIRST YEAR.

* *Preliminary Examination Course*.—English language, English history (modern history), mathematics.

Three of the following, one of which must be a language:—

Greek, Latin, French, German, elementary mechanics, chemistry, geography.

In the optional subjects the pharmaceutical student would be recommended to take: Latin, elementary mechanics or chemistry, and French or German. Attendance in college-classes for this examination is not exacted by the university.

SECOND YEAR.

Intermediate Examination Course.—Three of the following; provided that of the three subjects selected one shall be pure mathematics or applied mathematics or biology:—Pure mathematics; applied mathematics; physics, with practical work (2 hours); chemistry, with laboratory (4 hours); biology, zoological and botanical portions, lectures and laboratory; engineering (first year's course), with mechanical drawing and engineering laboratory (2 days per week), or engineering (second year's course), with mechanical drawing, and engineering laboratory (2 days per week).

Recommend biology, physics, and chemistry.

THIRD YEAR.

Final Examination Course.—Two of the following:—

Pure and applied mathematics; physics and laboratory (2 days) chemists and laboratory (2 days); zoology and laboratory (2 days for three terms); botany and laboratory (1 day); physiology and practical histology, with physiological laboratory (1 day); geology—lectures and practical work (2 hours), with paleontology or applied geology—lectures and demonstrations or mineralogy, with practical work (2 hours); mental and moral science; engineering, two courses, with mechanical drawing and engineering laboratory (2 days); engineering (second year), with mechanical drawing and engineering laboratory (2 days), and, physics, with practical work (9 hours).

One of the following to be presented at either the Intermediate or the Final examination, the standard being that of the Intermediate examination in either case:—

Applied mathematics, logic, French, German, English literature, surveying, applied mechanics, pharmaceuticals (including pharmacognosy, pharmaceutical chemistry, and pharmacy). Recommended chemistry, botany, and pharmaceuticals.

Those students who pass the preliminary examination upon entering the college, and who pass the intermediate at the end of their first year, can present themselves for the final examination at the end of the second year, but they are not permitted to proceed to their degree until they have spent a further—a third—year in study approved by the Board of Studies.

With Mr. Grier's assistance the author compiled the following table showing the approximate number of hours which, under the scheme, would be devoted to each subject:—

INTERMEDIATE AND FINAL COURSES.

Chemistry—Elementary	... Lectures, &c.	... 100	hours
"	" ... Practical	... 180	"
Biology	... Lectures	... 110	"
"	" ... Practical	... 200	"
Physics	... Lectures	... 60	"
"	" ... Practical	... 60	"
Chemistry—Advanced	... Lectures	... 100	"
"	" ... Practical	... 300	"
Botany	... Lectures	... 60	"
"	" ... Practical	... 180	"
Pharmacognosy	... Lectures	... 80	"
"	" ... Practical	... 100	"
Pharmacy and pharmaceutical chemistry	... Lectures	... 90	"
Pharmacy	... Practical	... 150	"
Pharmaceutical chemistry	... Practical	... 300	"

An inspection of the schedule will reveal the fact that up to the intermediate examination it is an ordinary science course, and will provide the student with a mental equipment which will serve him in any department of chemistry if he studies the subjects recommended. The same is no less true of the final examination, to which is only added his particular technical subjects.

Blackpool Chemists' Association.

THE annual meeting was held at the Palatine Hotel on Tuesday, February 17, Mr. Laurie (President) in the chair. Considerable time was taken up in discussing alteration of rules with a view to the Association becoming independent of the Tradesmen's Association. Mr. SANKEY, Hon. Secretary, in submitting his report of the year's proceedings, referred to the satisfactory understanding which had been arranged for earlier closing during the winter months, also to the actual part taken in the P.A.T.A. Conference by writing some of the most important manufacturers of proprietaries, and to what was done on the titles question, the last matter resulting in a visit of Mr. Bremridge and Mr. Ohater to Blackpool. Mr. ASHTON, Hon. Treasurer, submitted the balance-sheet duly audited, showing an increased balance in hand. Mr. LAURIE proposed Mr. Turver as President for the ensuing year. This was agreed to, and Mr. TURVER, in reply, said he should endeavour to continue taking an active part in pharmaceutical politics. Messrs. Laurie and Keeley were elected Vice-Presidents; Mr. Sankey, Hon. Secretary; Mr. Buckley was elected Hon. Treasurer; Messrs. Johnson, Ashton, Moyson, Boothroyd, and Sykes were appointed members of the Committee; and Messrs. Richardson and Greenwood auditors. Mr. TURVER proposed a hearty vote of thanks to the past President, Mr. Laurie. Mr. ASHTON seconded, and several supported the motion, which was carried with applause.

Bradford Chemists' Association.

A SPECIAL meeting of the Bradford chemists was held on February 20 for the purpose of considering

THE PRESENT POSITION OF THE P.A.T.A.

The chair was taken by the President (Mr. J. A. Mitchell), and there was a large attendance of members.

Mr. A. HANSON introduced the discussion by reading a letter from the Secretary of the P.A.T.A., including draft resolutions which it was suggested should be passed. He also presented a draft petition, which it was suggested

should be signed by every registered chemist in Bradford. He expressed the opinion that no registered chemist who was interested in himself and his business could have any objection to sign the petition. Alderman DUNN said he thought they should prepare a petition of their own, expressing their views in their own language, rather than to accept any stereotyped form. He suggested also that they should go a step further, and mention that at some future meeting the chemists of Bradford would take into consideration the question whether they should continue to stock the goods upon which they had not a fair margin of profit. Mr. SILSON said he also thought that it was well to prepare a petition of their own. Mr. WADDINGTON said he wished them to appoint a committee to canvass every member of the trade in Bradford and the district. Despite the continual work of the Association, he had quite recently come across a chemist who did not know what the C.D.A. was. That and other circumstances suggested to his mind that there was need of missionary work even in Bradford. He would strongly support the appointment of the committee to canvass the whole trade on behalf of the Pharmaceutical Society and the P.A.T.A. That morning he had had a conversation with a leading grocer in the city, and he found that the Grocers' Association was taking up the matter of proprietary articles and refusing to stock any new article which did not yield grocers a guaranteed profit of 15 per cent. He thought proprietors might properly look for similar action on the part of the chemists. Mr. MARSHALL said grocers were in a far stronger position for action of that sort than chemists were. There was a great number of grocers only fighting the co-operative stores, but the number of chemists was relatively small, and the number of their opponents was proportionately larger. Mr. ROGERSON said Mr. Marshall's point appealed to him particularly because it was generally accepted as a principle that in turning over an article the chemist spent 10 per cent. in rent and rates and taxes. Therefore, a guaranteed profit of 15 per cent. would not do. Mr. WADDINGTON said he had not suggested that they should be satisfied with 15 per cent. as the grocers were, but had only mentioned the matter on account of the principle involved. Mr. SILSON said that they had been forced to sell stuff for less than 15 per cent. Mr. WADDINGTON thought one step of importance in the present situation was to have a Secretary appointed. He proposed that Mr. Hanson's name should be put before the Council of the P.A.T.A. as Secretary for the Bradford district, and this was accepted by the meeting.

A Member inquired whether they would be keeping within their legal rights if they declared that they would take concerted action to stop the sale of any article. Mr. HANSON said they could do just what they liked on the question whether they would add an article to their stock or not. ALDERMAN DUNN said he supposed they had the right to stock anything they liked or to refuse anything they liked. They had not at present said that they would take any concerted action. They had only said that if the proprietors did not fall in with their request the Association would consider what future action should be taken. Mr. WADDINGTON observed that they had a perfectly legal right to say that if the profit upon a certain article was not remunerative they would not stock that article.

RESOLUTIONS.

Upon the proposition of Mr. HANSON, seconded by Mr. STEAD, a resolution was unanimously passed emphatically declaring the approval of the meeting of the action of the P.A.T.A. in refusing to deal with the proprietors who declined to disclose their identity, and the following resolutions were also passed unanimously:—

That this meeting of the chemists of Bradford and district has seen with pleasure and satisfaction the recent additions to the protected list, and would encourage the committee of the P.A.T.A. to continue with unabated energy their valuable work for the trade at large.

That a statement of our opinions be prepared and sent to the proprietors of articles not at present upon the P.A.T.A. list.

The statement approved in draft was as follows:—

The signatories to this petition are chemists in business in Bradford and the district. It has been argued by proprietors that the demand for protected prices emanated from a small section of the trade. We desire to show that this is not so in this

district, and we believe that this district is in this respect typical of the whole country. We respectfully urge you to put your preparations on the P.A.T.A. list for the following reasons: (1) The distributors of your article are entitled to a guaranteed profit on all your goods. We do not believe that you desire that they should serve you without remuneration. (2) The sale of your articles, upon which no profit is made, is naturally discouraged by wholesaler and retailer alike. (3) The vast majority of chemists desire fixed and reasonable profits, and this wish cannot be realised without the assistance of the proprietors. Mutual agreement amongst chemists themselves as to prices is impossible if a section, however small, is allowed to cut. (4) It is to your interest that the trade should be willing distributors of your goods. (5) The easiest and most effective way of protecting prices is through the P.A.T.A. We shall be glad if you will reply to this communication through Mr. D. S. Priestley, the Secretary of the Bradford and District Chemists' Association, who will lay your views before us at a future meeting.

This statement was signed by all present at the meeting, and will be submitted to those who were absent.

After further discussion on P.A.T.A. matters the meeting ended.

Cardiff Chemists' Assistants' Association.

A MEETING of this Association was held on February 12, at the Queen's Café, Cardiff, Mr. A. B. Sparrow in the chair. Mr. W. J. Shenton was elected Hon. Secretary, in the place of Mr. Davies, who has left the town. A discussion on general matters took place, and Mr. LEWIS put forward a suggestion that the senior members of the Association might be disposed to assist the juniors by giving lectures on various subjects. After a discussion on the matter, the CHAIRMAN agreed to assist in botany, Mr. FERRIER in chemistry, and Mr. MORGAN in pharmacy. It was decided that the lectures should be given once a fortnight, the time to be arranged to suit the convenience of all. It is proposed to hold a social evening next month to discuss prospects for the cricket season.

Newcastle-on-Tyne Chemists' Association.

A MEETING of this Association was held, on the invitation of Mr. T. Maltby Clague (Messrs. Proctor, Son & Clague), at his x-ray laboratory, Saville Row, Newcastle-on-Tyne, on February 11. Mr. G. F. Merson (President) occupied the chair, and there was a very good attendance of members. Mr. CLAGUE gave an interesting sketch of the principles of radiography, illustrating the various pieces of apparatus by blackboard diagrams. This was followed by practical demonstrations on the anatomy of several members present. Not a few of the lecturer's appliances are of his own design and manufacture, which added very considerably to the interest of the exhibition.

Before breaking up, Mrs. Clague entertained the company to tea, coffee, and other light refreshments. The departure from the ordinary routine of meetings was very successful, and both the lecturer and Mrs. Clague were cordially thanked for their kindness.

Reading Chemists' Association.

A MEETING of this Association was held at Reading University College on February 12. Mr. E. Cardwell presided, and a paper was read by Dr. LUXMOORE, F.I.C., on

SCHEEL: HIS LIFE AND WORK.

Scheele, who lived in the eighteenth century, when chemical knowledge was extremely limited, devoted all his energies to experimental chemistry. Starting in very poor circumstances as an apprentice to an apothecary, he occupied every moment of his spare time in chemical research. He did not attempt to theorise, but managing to obtain what books on the subject were then in existence, repeated the experiments and made endless others in both organic and inorganic chemistry. Among his discoveries and isolations were tartaric acid, chlorine, baryta, the salts of manganese, oxygen, uric acid, molybdenum, glycerin, lactic and mucic acids. Scheele also investigated the action of sunlight on silver chloride, and discovered the identity of plumbago with charcoal and the diamond. In 1777 he wrote his

epoch-making treatise on "Air and Fire," in which he showed a chemical knowledge far in advance of his time, though, like his contemporaries Cavendish and Priestley, he was still a believer in the phlogistic theory. Dr. Luxmoore pointed out that although Scheele did a lot of work in investigating Prussian blue, and succeeded in extracting hydrocyanic acid from it, he never seems to have discovered that the latter body possesses poisonous properties. He died at the age of 43 years, having, in spite of his poverty and the great disadvantages under which he laboured, succeeded in doing much toward laying the foundations of modern chemistry.

Sheffield Pharmaceutical Society.

At a meeting of this Society on February 12, Mr. M. H. STILES, F.R.M.S., of Doncaster, lectured on

INFUSORIAL EARTHS AND THEIR USES.

He referred to the important part played in nature and in our daily life by those minute organisms whose structure and presence are mainly revealed by the microscope. The term "infusoria," as applied to the organisms mainly instrumental in the production of infusorial earth, was no longer correct. In the time of Ehrenberg it comprised diatoms, desmids, and many other protophytes, such as volvox, all of which are now referred by the great majority of naturalists to the vegetable kingdom. Still, the term as given to the fossil remains of the *Diatomaceæ* was a convenient one, and would probably be retained for many years to come. Diatoms, which constituted the great mass of infusorial earth, were a family of confervoid algæ, each consisting of a single cell varying much in shape, with its external coat consolidated by siliceous matter. The indestructible nature of flint resulted from the permanence of the skeleton after the cell-contents were removed by decay or otherwise. The endochrome consisted of a viscid protoplasm, tinted by a yellowish-brown colouring-matter, which was probably a modification of ordinary chlorophyll. Their distribution was universal, and wherever there was natural water it was safe to say that diatoms were almost sure to be found. Notwithstanding their minute size, diatoms had played an important part in building up the earth's crust. The accumulation of their flinty skeletons at the bottoms of lakes, or of the ocean, formed beds of considerable thickness, which, in the course of time, by changes of level, became converted into dry ground. In this manner the various infusorial earths had been produced, most of them in fresh water. Probably the most important deposit from an economical point of view was kieselguhr, covering a considerable area in a thinly populated district of North Germany, between Hamburg and Hanover, and in some places attaining a thickness of 150 feet. Dimatos was an infusorial earth of remarkable purity, imported from Australia, where, about a hundred miles from Melbourne, it was found in a basin of considerable area, but not of much depth. It was pure white in colour, and differed from most others found in trade in respect of being in its natural condition, having undergone neither chemical treatment, washing, nor calcination. Tripoli was a diatomaceous deposit, met with in Bohemia and Hungary, and was used in the polishing of metals. The well-known "Turkey stone" employed for sharpening the finest-edge tools consisted of infusorial earth consolidated by heat. Siliceous was another variety of infusorial earth which had undergone partial consolidation by pressure. "Mountain flour" was the name given to a deposit met with in Norway and Sweden, which, in time of scarcity, the inhabitants mixed with their flour in making bread. Speaking of the uses of infusorial earths, the lecturer said that kieselguhr was most generally employed, owing to its cheapness, purity, and absorbent properties. It was used in the manufacture of dynamite from nitro-glycerine. Combined with a certain proportion of asbestos, it served as the filtering medium of the Berkefeld filters. Mixed with carbolic acid it formed ordinary disinfecting-powder. Dimatos served as an admirable filtering medium for chemical and pharmaceutical work, and was also used as a basis for toilet and tooth powders.

The paper was illustrated by slides of the various gatherings, displayed under microscopes lent by the President of

the Society (Mr. John Austen), and also by a series of twenty-four photo-micrographs of selected and strewn diatoms. The photographs, the production of the author, were much admired for their technical excellence. In acknowledging a vote of thanks, and in response to the expressed wishes of some of the audience, Mr. STILES supplemented his paper by a description of his method of cleaning and mounting diatoms, and of the apparatus and process adopted in the production of his photo-micrographs.

Dover Chemists' Association.

A MEETING was held on February 18, when there were present Messrs. Barnes, J.P., Brown, Ewell, Peake, and Forster. Mr. E. M. Stevens was absent owing to his lecture on "My Trip to Palestine, &c.," at St. Bartholomew's Schools. It was proposed by Mr. BROWN, and seconded by Mr. BARNES, that Alderman Peake, J.P., be re-elected President. This was carried unanimously. In returning thanks, Mr. PEAKE mentioned that it was twenty-two years since he retired from business.

Mr. Ewell was re-elected Treasurer and Secretary. It was decided to levy 2s. 6d. per member for expenses. Members generally congratulated Mr. Ewell on his economical running of the Association.

A large amount of correspondence was submitted.

LEGISLATION AND DE-LEGISLATION.

Mr. Stedman, of St. Leonards, wrote inviting the members to a meeting at St. Leonards to discuss pharmacy questions with Mr. Bremridge. It was pointed out that the time made it difficult to get to St. Leonards, and it was suggested that a meeting be held at Dover or Canterbury for East Kent. Mr. Ewell was requested to attend on behalf of the Dover chemists, and discuss the possibility of an East Kent meeting with Mr. Bremridge.

A letter from the Secretary of the Pharmaceutical Society *re* the Draft Pharmacy Bill was read and discussed. It was decided to await further information before taking action.

A *résumé* of the Committee on Poisons report, forwarded by the Editor of THE CHEMIST AND DRUGGIST, formed the principal item of discussion. The members were strongly of the opinion that any Bill embodying these suggestions should be strenuously opposed. Mr. BARNES pointed out that chemists would have little influence until they have one or two members of Parliament who are chemists and druggists. He also pointed out that chemists as a body do not put sufficient pressure on their members of Parliament. The Committee's report was strongly ridiculed by the members, and as to the suggestions *re* arsenic, it was considered more than doubtful that seedsmen know more about preparations for agricultural purposes than chemists; and as to the question of cheapness, it was certain that no ironmonger could supply at lower prices than chemists in East Kent, as 5 per cent. often represents the profit on agricultural transactions. The members failed to see how prices could be lowered. The report of Mr. Cross *re* doctors' shops was strongly opposed. The members decided to interview the local members of Parliament (the Home Secretary and Secretary for Ireland), if necessary.

Exeter Association of Chemists and Druggists.

ON February 13 a meeting of this Association was held under the chairmanship of Mr. E. Lemmon (Vice-President), there being also present Messrs. P. F. Rowsell, E. F. Stone, T. C. Milton, H. Wippell Gadd (Hon. Secretary), J. H. Lake (Hon. Treasurer), F. Vinden, W. Aplin, and Harris.

THE CONVENTION.

Mr. T. C. MILTON stated that the Association was well represented at the recent P.A.T.A. Convention, the delegates closely watching the whole of the proceedings thoroughly approving of the whole of the resolutions passed. He was convinced there was a very good future for the P.A.T.A. There was a strong feeling among the chemists of the country that if proprietary articles were to be a success in this country the manufacturers would have in the future to allow a reasonable profit to the vendor.

The CHAIRMAN said they were very much indebted to those gentlemen who represented the Association at the recent Conference. Undoubtedly something very tangible arose from the meeting, and it appeared to him from evidence on all sides that more such meetings would follow in the future. Mr. MILTON suggested that steps should be taken from time to time to ensure that alterations or additions made to the P.A.T.A. list were well known amongst the vendors of proprietary articles. Mr. ROWSELL said it was a subject which wanted dealing with from a grocer's standpoint, and he would undertake to see that it was discussed at the next meeting of the Council of the P.A.T.A.

The HON. SECRETARY read a letter from Mr. Glyn-Jones on behalf of the P.A.T.A. suggesting that this Association should take steps to communicate with individual proprietors with a view to getting their articles placed upon the protected list. It was also suggested that a petition, signed by all the chemists of the district, asking proprietors to protect through the P.A.T.A., should be sent to the leading proprietors. There was a consensus of opinion that if the grocers would co-operate in the matter it would greatly strengthen the hands of the Association. Mr. ROWSELL therefore moved that arrangements be made with the view to the holding of a joint meeting of chemists and grocers at an early date to consider the matter. Mr. E. F. STONE seconded, and the resolution was carried unanimously.

THE BENEVOLENT FUND.

A letter was received from the Federation of Local Pharmaceutical Associations suggesting that, in view of the importance of keeping up the efficiency of the Benevolent Fund of the Pharmaceutical Society, it would be desirable that all local associations should once a year arrange for a special collection to be taken at the annual social gathering. It was pointed out that the Benevolent Fund, which was admitted to be a very deserving institution, was well supported individually by the chemists of Exeter, and no resolution was come to.

North Staffordshire Chemists' Association.

A MEETING of this Association was held on February 12 at the Roebuck Hotel, Stoke-on-Trent, Mr. J. Averill, of Stafford (the President) occupying the chair. There were also present Messrs. T. C. Cornwell (Vice-President), Weston Poole (Treasurer), Edmund Jones (Hon. Secretary), Bentley (Assistant Hon. Secretary), Marson, Fearnley, Wrench, Morrison, Allison, Bottonley, Mellor, and Challinor.

THE P.A.T.A. CONVENTION.

Mr. EDMUND JONES submitted a list of signatures of chemists in business in the district to a letter addressed to manufacturers of proprietary articles who have not yet joined the P.A.T.A., and who were not represented at the recent Convention.

Mr. AVERILL read the letter which had been drawn up, in which regret was expressed that the said manufacturers were not present at the Convention, and that thus the opportunity afforded for mutual consideration was lost. The President proposed that the draft letter should be printed and forwarded to the manufacturers whose names were agreed upon.

Mr. T. C. CORNWELL (Vice-President) proposed that a rider should be added, showing what a large proportion of chemists in North Staffordshire (which might be regarded as typical of the rest of the country) had joined the P.A.T.A., and expressing the opinion that this effectively disposed of the suggestion that the P.A.T.A. only represented a small proportion of the chemists of the country.

This suggestion of Mr. Cornwell was accepted, and the motion was then put and carried unanimously, it having been first explained by Mr. EDMUND JONES that out of a total of fifty-five chemists in business in the North Staffordshire district fifty-four had signed the draft letter, forty-six of whom were now members of the P.A.T.A. and forty-one of the C.D.A.

THE BENEVOLENT FUND.

A letter from the Federated Association of Local Associations, suggesting that a subscription to the Benevolent Fund of the Society should be taken annually, was placed before the meeting.

After some discussion it was agreed to leave the matter over for further consideration at a future meeting, but on the suggestion of Mr. AVERILL it was agreed to send a reply to the Association approving of the collection, and stating that the best time for it would be the annual dinner.

PREPARING FOR THE CAMPAIGN.

Mr. EDMUND JONES proposed that a letter be sent to the Federation meeting drawing attention to the resolution passed at a previous meeting, urging upon the Pharmaceutical Society the advisability of appointing inspectors to visit the chemists throughout the country, who would explain the objects of the Pharmaceutical Society and the advantage of membership. After discussion it was decided to postpone the matter for the present.

The PRESIDENT read a draft Bill from Mr. Bremridge, with a letter asking for the names of any M.P.s who might with advantage be approached with the object of securing their support to the Bill when it should be introduced into Parliament.

The draft Bill was read, and it was decided that individual members of the Association should consult the M.P. for their division where possible.

OTHER MATTERS.

A vote of condolence with the widow of the late Mr. Baden Bengier was next passed in silence.

Mr. CORNWELL drew attention to a letter reprinted in THE CHEMIST AND DRUGGIST (signed by Mr. Dobbs) on the proposed poisons regulations. The speaker expressed the opinion that the Pharmaceutical Society did not devote sufficient time to the education of chemists in a knowledge of toxicology, and that the Society might with advantage have their attention directed to this matter, and that it might be included in the syllabus, and thus do away with the contention in the letter.

Mr. E. M. MELLOR promised to read a paper at the next meeting of the Association, dealing with the poisons laws and the effect that the proposed legislation as to the sale of packed poisons by unqualified vendors would have upon the chemists of the country.

Several members drew attention to the advertisement of "Koko," now appearing, offering a 4s. 6d. bottle for 1s. 6d. and 4d. extra postage, and expressing the opinion that it was a most unfair mode of advertising. This was the general opinion of the meeting.

Mr. BOTTOMLEY, referring to the P.A.T.A. movement, mentioned a case in which he was asked for a bottle of Warner's Safe Cure. He asked 4s. 3d. for it, and the customer refused to pay so high a price. After a week, in which doubtless she had tried other patent-medicine vendors in the town, she returned for a bottle at the protected price. This showed the effectiveness of the P.A.T.A. system of insuring the maintenance of prices.

The remainder of the evening was spent socially.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING of the Association was held at 36 York Place, Edinburgh, on February 11, Mr. J. W. Plenderleith (President) in the chair. Mr. JOHN BANKS read a paper, entitled

PHOTOGRAPHY IN THEORY AND PRACTICE,

in which he described the apparatus used in taking photographs, and the processes which the plate goes through after exposure. The necessity for a good lens was urged, and such points as focal length, depth of focus, relative exposure, and flatness of field explained. Exposure is relative to the development employed, and as the developer which gives the best results is used, it is customary to expose for that developer, such exposure being known as the correct exposure. Pyro-soda Mr. Banks commended as the safest developer. Hydroquinone, producing clean negatives and being cheap, is most used by amateurs, but does not allow of so much latitude in exposure as pyrogallol. What exposure to give a subject was next discussed, the rule being to expose for the shadows. The beginner should learn to judge by the light on the ground glass, taking into account the lens, size of plate, and time of the year and day. Exposure will then be a matter of much more accuracy than generally obtains. At the conclusion of the address, Mr. Banks gave a practical demonstration of the platinum, sepia platinum,

and carbon processes of printing, and, on the motion of the CHAIRMAN, a cordial vote of thanks was awarded to Mr. Banks.

Birth.

AUSTEN.—On February 16, at 20 Dover Road, Sheffield, the wife of Mr. John Austen, pharmaceutical chemist, of a daughter.

Deaths.

ARCHER.—On February 11, at Thurlough Road, S.W., Mr. Frederick William Archer, managing director of the Patent Borax Company (Limited). Aged 37.

BLANKLEY.—At West Bridgford, Nottingham, on February 11, Helen, widow of the late Mr. William Blankley, chemist and druggist, Arnold. Aged 74.

SEATON.—At Pearson Park, Hull, on February 13, Alderman John Love Seaton, pharmaceutical chemist. Aged 82. Alderman Seaton was born at Chatham, and served his apprenticeship with Messrs. Cooper & Chambers, wholesale druggists, Rochester. He was for some time an assistant, and subsequently a traveller, for that firm; but in 1847 he started in business on his own account at Whitfriargate, Hull. Mr. Seaton was a homeopathist, and the present Homeopathic Dispensary originated from his business. After a few years he forsook pharmacy and founded the very successful firm of J. L. Seaton & Co., oil-refiners, from which he retired in 1889, the last years of his life being devoted almost entirely to public affairs. For nearly forty years Alderman Seaton took an active part in the public life of Hull. He was elected a councillor in 1867, and six years later he was made an alderman. He was Mayor of Hull in 1873-74, and during his mayoralty he established the Hospital Saturday Fund, and he was elected President of the Chamber of Commerce, President of the Guardian Society, and Chairman of the Parliamentary Committee of the Corporation—a position he held for twelve years. On the occasion of his golden wedding, on August 19 last, the venerable alderman was presented with an artistic plaque of damascened steel by the City Council; while in 1890 he was presented with his portrait in oils by his colleagues on the Council as a tribute to his long and useful services on that body. Alderman Seaton was placed on the Commission of Peace for the borough in 1875, and, besides the public offices already enumerated, he was a representative of the Corporation on the Humber Conservancy Board, a Commissioner of Pilots, one of the Advisers of the Master of the Charterhouse, a trustee of Bishop Watson's Charity, a member of the committee of the Charity Organisation Society and of the Infirmary Board, and a Guardian of the Poor for Sculcoates Union. Alderman Seaton was a determined and strenuous opponent of the income-tax, and was practically the founder of the Anti-Income-Tax Association of Hull. His zeal for this cause at one time knew no bounds, and he took so active a part as an agitator against the tax by the speeches he delivered all over the country that he was brought into contact with the late Mr. W. E. Gladstone, Lord Beaconsfield, and many other leading politicians. Alderman Seaton leaves a widow, a daughter, Mrs. Dahl, and a son, Mr. R. C. Seaton, M.A., who is one of the masters of St. Paul's Schools, London. The funeral took place on February 17 at the General Cemetery, Spring Bank, a service having previously taken place at St. Jude's Church. Representatives of the Corporation, Masonic lodges, and other bodies were present (Mr. C. C. Bell representing pharmacy). It being many years since such a largely attended funeral took place in the district.



Poisons in Fiction.



II.

Or the tale of the machinations 'gainst the beautiful country gyrl,
Who was true to her rustic lover and spurned the dastardly Earl;
To a journey they had lured, and the deep-dyed accomplice sat
In the self-same third-class carriage—disguised in a tall silk hat.
She thought of her absent rustic and dreamed of his last farewell,
And as she pictured their meeting she imagined a sweet, rare smell
Was wafted across from the corner where the "toff" sat prim and stiff,
And the heroine lapsed unconscious with "chloroform—single whiff."

Westminster Wisdom.

(From our Parliamentary Representative.)

THE NEW SESSION.

So far as the new Session has proceeded it has been exceptionally dull. Small attendances and listless debates are a daily experience, and as a consequence tickets for the Strangers' Gallery are going a-begging. Matters will brighten up in a week or two when the debate on the Address has been disposed of. As for the legislative programme, there is plenty of material foreshadowed in the King's Speech to keep the House busy till August. And Mr. Chamberlain's return will lift at least some of the proceedings out of the rut of monotony. There will be one great night in the House when the Colonial Secretary gives his "impressions." Already members are receiving inquiries as to the probable date, so that applications for tickets may be sent in early.

DEPARTMENTAL BILLS.

Besides the legislation mentioned in the Speech from the Throne, there will be, of course, a number of departmental measures, but it is too early to ascertain details. From all I can gather Ministers, with the recollection of the congested order paper last Session still fresh, will be unwilling to do anything that is not absolutely necessary, and on that account a Bill based on the Poisons Report is not looked upon at this moment as anything like a certainty.

THE POISONS COMMITTEE'S REPORT.

The long-delayed report to which I have just alluded was circulated with the Parliamentary papers on Wednesday morning. Since then I have seen several members connected with the medical profession and several others who are also interested in the matter, but one and all have confessed that they have not yet perused either the report or any of the evidence. Their opinions must therefore be reserved in the meantime. The only thing they will say is, as I have stated, that legislation on the part of the Government is improbable this Session, but it is quite on the cards, as many of your readers must know, that a Bill hostile to the interests of the Pharmaceutical Society may be introduced by a private member.

College Notes

ON February 13 the students of the Sheffield College of Pharmacy, accompanied by the Principal (Mr. J. W. J. Turner) and Mrs. Turner, went for a day's walk into Derbyshire. The route chosen was through Ringinglow, over the moorland by Burbage Bridge, the whirr of the red grouse (*Lagopus scoticus*) being much in evidence. Lunch was partaken of at the Ordnance Arms, Hathersage. A visit was made to the church and Little John's grave. A number of male yew-trees were in flower. The return journey was by Grindleford and Fox House. Sheffield was reached by 8 o'clock, after a most bracing twenty-two-mile walk. Specimens of the female flowers of *Corylus* were collected, as well as specimens of *Asplenium Ruta-muralis* growing on the walls at Banner Cross, Ecclesall.

INTER-PHARMACY FOOTBALL LEAGUE.—A smoking-concert in connection with the League will be held on Thursday, March 12, at the Horns Assembly Rooms, Kennington Road. Mr. M. Carteghe has consented to take the chair, and will present the cup and medals to the winning team. This is the first smoker yet held in connection with the League, but it is hoped to make it an annual event, especially as it has been felt for some time that the handsome challenge-cup presented to the League by Mr. Watson Will ought to be handed over to the winners in a more fitting manner than has been the case in the past. The committee of the League hope for the support of those interested in pharmaceutical football, and especially those "old boys" who have in the past competed for the trophy. A good programme has been arranged, including Mr. Sydney Gandy, and the price of tickets has been fixed at the very low figure of 1s. Tickets may be obtained from the following representatives of the clubs interested in the League:—

"Square," Mr. B. Collett, 17 Bloomsbury Square;
"Metros," Mr. F. F. de Morgan, 162 Kennington Park Road;
"London," Mr. E. A. Webb, 323 Clapham Road;
Muters, Mr. H. Spencer, 325 Kennington Road;

or from the Hon. Secretary of the League, Mr. W. B. Nelson, 323 Clapham Road.

WESTMINSTER COLLEGE OF PHARMACY.—On Tuesday evening the students, past and present, of the Westminster College of Chemistry and Pharmacy were in force in the Grand Hall, Bridge House Hotel, London Bridge, the occasion being a smoking-concert in honour of Mr. George S. V. Wills's birthday. Mr. Wills presided over a company numbering 200 or more, and there was a very lengthy programme; in fact, when THE CHEMIST AND DRUGGIST representative left at 10 o'clock, encores were being demanded most vigorously, and the programme was not half through. Mr. Harry Sutch, Mr. Fred Kipping, Mr. Alfred Kersey, and Mr. J. E. Walden were amongst those who seemed to be especially popular. Before the interval, Mr. Stokoe, one of the students who is gifted with oratorical powers of high order, went to the platform to wish "Many Happy Returns of the Day" to the Chairman, and to propose the health of Mr. and Mrs. Wills. He finished his speech by presenting Mr. Wills with a standard lamp. Mr. Wills, in the course of his reply, stated that the present term is one of the most successful in the history of the College. More students passed the Minor examination in January than ever before, and at present all the benches are full with the exception of about six. This was the twenty-seventh occasion on which he had met the students on his birthday, and he had to thank them for the twenty-seventh present, although there had been others on different occasions, all of which he took as being evidence of the friendly relations between principal and pupils. Mr. Wills added that he is not yet feeling old, and he hoped the best years of his life are still to come, so that he may add many more to the thousands of pupils who have passed through his hands since he started as a teacher. Other toasts were "Mr. Walden" (Secretary), "The Students," and "Visitors."

Observations and Reflections.

BY XRAYSER.

The Bloomsbury Soiree

which last week took the place of the monthly evening meeting of the Pharmaceutical Society was a cheerful, interesting, and instructive function. I use the third of those adjectives with some hesitation, for to those of us whose brains grip new ideas with difficulty it was not easy to absorb the knowledge provided while wedged in a narrow gangway with an average of two sociable handshakings per minute. But the educational provision was there, and it struck me that the exhibits were very happily selected specimens of technical pharmacy with a decided leaning towards the scientific. "There is a risk of commercialism in this," said an earnest young pharmacist to me, and I envied his faculty for thus emancipating himself at ten minutes' notice from the slavery of the counter and soaring into the empyrean of philosophic rapture. An older man with soul-longings of a different kind, tired perhaps of both shop and science, thought there ought to have been a little music. I only mention these observations to show how ingeniously some people will discover occasion for criticism.

Chemists' Wine-licences

are being refused in sufficient numbers to show that the new Licensing Act will furnish some pharmacists with a new grievance. It is a little hard in a town where all your competitors are selling wines to have that given as the reason why your application should be refused. So, too, a Pecksniffian homily addressed to the chemist on the sin of opposing the wine-merchant, by a magistrate who perhaps gets all his medicines from the stores, is a little hard to bear. The *Law Times*, referring to a licence granted to a chemist with the condition that only medicated wines should be sold, argues that this limitation was *ultra vires*. There are no such limited licences to be had, and the Justices are not empowered to create them. But as the granting and renewal of the licence are now entirely within their discretion this pretty point is likely to get blunted in practice. A bargain between the Bench and the applicant may not be within the sanction of the law, but it can be made effective enough.

The Co-operative Difficulty

with which the P.A.T.A. is faced can only be got round by clever steering. It is clear that if the Societies give a rebate, or "divi" as they call it, on protected articles they are cutting them; it is also in the last degree unlikely that they will consent to openly add the "divi" to the selling-price. "Co-operator and Minor Man" describes the proposal that they should do so as "a preposterous idea," and it certainly looks so. But have they been asked to do this? Surely a simpler plan would be for them to exclude such articles from the divi account. They might have tiny labels to attach to these goods explaining why this must be done. The Co-operators need not object to this course because if it were taken the extra profit realised would ultimately get into the divi in an indirect way.

The Antiseptic Virtues

of the *Vaccinia* seem to have been known long before bacteria had been discovered. In the "Nouveau Dictionnaire d'Histoire Naturelle," published in 1803, Bosc, a noted naturalist of that day, who had been a French Consul in the United States, mentions that the savages there (the North American Indians) gathered the

berries in large quantities, and not only ate them as fresh fruit, but preserved them in the form of dry cakes for the winter. "These cakes," he says, "though badly made, I have found pleasant for eating after being kept for two years." All the species of *Vaccinium*, he says, are equally suitable, but the savages prefer the *V. corymbosum* as yielding the most abundant fruit.

The Poetry of Pharmacy.

though ruthlessly attacked from age to age by iconoclastic investigators of various kinds, cannot be wholly suppressed. In the old days of faith the names of saints and angels were associated with the healing plants through which they exercised their beneficent powers. So came St. John's wort, St. Ignatius's bean, St. Christopher's herb, and many others into our botanic vocabulary. In somewhat similar fashion it may be supposed such names as Palma-Christi, Trinity herb, Solomon's seal, came to be applied. Protestants and puritans contended against this tendency, but the Linneans struck at it much more effectually. Lunar caustic and mercurial ointment are survivors of alchemical poetry. Crabs' eyes, hartshorn, and oil of swallows are pharmaceutical titles which have found their way into the poetic realm if they were not born to it. Our own period is responsible for such pretty conceits as citrate of magnesia, castor-oil pills, and arsenical soap, to name only a few which soulless judges have prosaically dissected. The latest victim of the materialistic bludgeon is the tempting syrup of figs. No regard is paid to the service to humanity which this name has effected in bridging over the nauseous associations which cling to the term senna. It is refused rights of citizenship because it is not strictly accurate. The plea of extenuating circumstances has no influence on the stern morality of an American Court. We shall next have druggists indicted for fraudulently concealing the character of their pills by a sugar coating, and then will come the turn of mothers who deceive their babies with a spoonful of jam in which the repulsive powder has been surreptitiously hidden.

Sir William Ramsay,

the Professor of Chemistry at University College, London (to whom, with Lord Rayleigh, we owe the discovery of the minor atmospheric elements), contributes a thoughtful essay on "The Value of a Degree" to the current number of the *Contemporary Review*. The article is in essence a severe criticism of our modern English system of examination, for which, as the writer shows, the London University is largely responsible. He describes in detail the methods by which degrees are obtained in the most famous universities of Germany and America, the principal distinction between those and our proceedings being that with them the examiners are the teachers who know intimately the mental acquirements of the candidates, while with us the tests are made by men who are for the most part absolute strangers. On the first blush no doubt the latter seems the fairer process, but Sir William Ramsay's inquiries and experience do not favour that view. He quotes a weighty opinion from Professor Remsen the President of the Johns Hopkins University in America. This competent authority says that at his University they did formerly call in outside examiners, but they found them extremely unfair. "We do not depend upon examiners," adds Professor Remsen, "for information in regard to our candidates." Further on he says, "In my opinion an examination is a very poor method of finding out what a young man knows, and certainly it is still less adapted to finding out what he can do." Sir William Ramsay finds that on the Continent and America men with degrees are sought after because the degrees of those countries do to some extent guarantee the power of independent thinking. Here they have value only in school circles. Sir William is himself LL.D., Ph.D., and D.Sc. Perhaps he valued those letters once, but now probably they are eclipsed by his K.C.B.

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Editorial Comments.

"Poison."

THE temptation is strong to treat the report of the Poisons Committee flippantly, and we might say things about it if that would serve a useful purpose. Two-thirds of the observations and recommendations could have been secured without the expensive formality of a Departmental Committee, but it is evident that the Committee was necessary to give weight to the remaining third, which will require the sanction of Parliament before it can be carried into effect. The findings and recommendations of the Committee are concisely summarised on page 321, and we have endeavoured to give the gist of the evidence on which they are based. The latter begins on page 325. The Committee considers that arsenic is at present treated far too carelessly—i.e., up to the point of reaching the hands of qualified persons. The Committee appears not to have recognised how irreconcilable are its observations on the carriage of arsenic with the recommendation that when this deadly poison is to be used for agriculture and horticulture it may be sold by any unqualified person. The Committee also considers that the Pharmaceutical Society has a hard task in enforcing the provisions of the Pharmacy Act as regards the sale of poisons, and leaves the stinging impression that the Society has been remiss in this respect, hard as Mr. Cross laboured to demonstrate the opposite. Then it recommends that the sale of arsenic and tobacco preparations for agriculture and horticulture, and of carbolic acid for these purposes and sanitation, should not be subject to the provisions of the Pharmacy Act. This is the only part of the report which

requires fresh legislation. The recommendations proceed to state what articles should be added to the schedule of poisons. These are specified on page 321, and may be realised forthwith by the resolution of the Pharmaceutical Council and the approval of the Privy Council. We see no reason why they should not be, except that most of the headache-powders sold at present will henceforth have to be labelled "Poison." The Committee appears to have worked with the original schedule; even Mr. Hills agrees to the addition of atropine, already on the schedule. The important third of the report that remains consists of the recommendation to create a third part to the schedule, upon which should be placed arsenic, tobacco (nicotine), and carbolic acid, with their preparations for the purposes already mentioned, which for these purposes may be sold by anybody. This is the point to be fought. It is a principle. The whole matter turns on a question of expediency or principle. It is not merely a question of three kinds of poisons specified. Once the new class is created, it may be infinitely extended without pharmaceutical intervention, for the Government Department which has been working for so many years to create a class of non-pharmaceutical poisons, hitherto without success, now gets through the Committee the stipulation (in effect) that in a new Act the Pharmaceutical Society shall have no power as regards Part III. of the schedule. The principle to be maintained is that chemists and druggists have, by order of the statute, qualified themselves to sell poisons, and the representatives of the Government now attempt to back out of their part of the bargain. Before they can consent, chemists and druggists will want to know the compensation they are to have—restriction on company-trading, dispensing of medicines, and, may be, a more general restriction as to the sale of officially recognised therapeutic agents. The trade has to face a possible acquiescence in the Committee's report for a *quid pro quo*. At present we see no evidence of anything of the kind. It is true that the Pharmacy Bill drafted by the Pharmaceutical Council will, if possible, be launched forthwith; but we are not so enamoured of that measure as to say that it is a set-off to the sacrifice of the principle of the 1868 Act, which is that poisons should only be sold by persons who have proved, by training and examination, their fitness for that purpose. At present we see no reason for saying to chemists and druggists that they should give up their birthright: the pottage is not yet in sight. We have already advised the Secretaries of all chemists' associations in the provinces of the result of the inquiry, and we understand that the Pharmaceutical Council is arranging a plan of campaign; but it is inadvisable for associations or chemists individually to take parliamentary action until definite proposals for amendment of the existing law come before the Legislature. Then we shall be prepared to give all the assistance in our power to conserve the rights of those whom the title of this journal embodies. Meanwhile, we strongly advise our readers to read and think over the report of the Committee and the *précis* of the evidence which we print.

A Dental Check.

THE failure of the British Dental Association to secure the conviction of Mr. Templar Malins for infringement of Section 3 of the Dentists Act is not surprising. The case looked uncommonly like a "try on." The Association a year ago succeeded in getting the defendant fined by the Cardiff Stipendiary, who was then decidedly of opinion that Mr. Malins had infringed the law, and expressed himself strongly on the subject, so that there appeared to be no

more favourable Court for considering a case in which special qualification had been reduced to the vanishing-point. The very full report of the proceedings which we published last week shows that the defendant's announcements contained not a single adulatory reference to his ability as a dental operator or the excellence of the work he does. He merely described the teeth he supplies and the operations he performs. The result was a foregone conclusion, but it was not arrived at without studious forensic argument on the part of the defence. The veterinary-forge case was again used in such a way by the prosecuting counsel as to convey the impression that the offer to perform dental operations is tantamount to using a description in the sense of Section 3. This appears to have succeeded before, but fortunately Mr. Kirby, for the defence, was able to quote a High Court case on Section 3 itself, and, although a Scotch case, and therefore not binding upon magistrates on this side of the border, it happens to bring into relief the facts which the British Dental Association studiously avoids, and which magistrates in their haste may overlook; besides, the judgment in the case embodies the opinions of three of his Majesty's Judges, and is therefore entitled to all respect. The case was reported in *THE CHEMIST AND DRUGGIST*, June 19, 1897, page 943. It was an appeal from a conviction by the Edinburgh Sheriff of an unregistered practitioner who used the descriptions "American Dentistry" and "Dental Office." The Justiciary Appeal Court held that these are not descriptions within the meaning of Section 3, and set aside the conviction, with costs. Lord Trayner then said:—

The statute nowhere provided that it should be unlawful for anyone to practise dentistry unless he was specially qualified. It might fairly enough be said that the statute contemplated that such persons would practise dentistry, as it provided that unregistered persons should not be entitled to exact fees for any dental operation. The appellant's inscriptions might, no doubt, be read by many that dental operations were performed on these premises, and performed by the appellant, but they contained nothing to imply that he was registered under the Act or that he was specially qualified to perform these operations.

Lord Moncreiff was equally emphatic. In the course of his judgment he said:—

The description contemplated by the statute was descriptive of an individual, and indicating his special qualification for the work by training and practice.

The Lord Justice Clerk confessed that at first he was inclined to take a different view (which is not unusual with his Lordship), but he concurred, and spoke in a similar strain to his brother Judges as to the right of individuals to perform dental operations. These observations probably had weight with the Cardiff Magistrate, and it would have been interesting to have had from him a written judgment (which is customary in reserved cases). It would have been interesting to have had his opinion as to defendant's practice now compared with what it was last year. But the Stipendiary found, after reflection, that the facts were all in favour of Mr. Malins. This is a surprise to the British Dental Association, who were confident of winning. The case is of service to the trade, for it has enabled us to print a record of announcements which do not hold out the practitioners to be specially qualified. As the decision has been arrived at on the facts there can be no appeal by the British Dental Association.

Antagonism.

It is curious to observe, in reading the report of the evidence before the Poisons Committee, that most of the members started in an inimical mood towards the pharmaceutical body. Professor Tilden, a pharmaceutical chemist, who partly owes his distinction in science to the helping hand which pharmacy gave him in his youth, must be

placed in this category; and Dr. Stevenson, who has so often remarked upon the necessity for a high standard in the Minor examination (which qualifies to sell poisons), appeared not to consider it necessary for the public to go to chemists and druggists for all poisons. After reading the report of the evidence, there is no fitter exclamation than "Save us from our friends!"

The Minority Report.

Mr. Walter Hills had little opportunity to distinguish himself in the short time he was on the Committee, but the able manner in which he deals with the whole question in his Minority Report more than justified his appointment. We daresay the position was exceedingly delicate, for the comparatively light demands of the Committee must have been a strong temptation to bridge the gap, and so unite the forces of the Privy Council and the Pharmaceutical Council in one legislative effort. Chemists and druggists owe thanks to Mr. Hills for sticking to the principle of the Pharmacy Act.

What the Privy Council will Do.

The usual course after a Departmental Committee of the Privy Council has presented its report to Parliament is for instructions to be given to the Government Department entrusted with the drafting of Bills to draw up a Bill on the lines of the recommendations of the Committee and for the Bill to be introduced as a Government measure. The Privy Council reports are usually acted upon promptly, and in this respect do not resemble the elaborate reports of Parliamentary Commissions which linger for years before being embodied in Bills, and are sometimes altogether lost to sight. We learn on inquiry at the Privy Council Office that there is no reason to doubt that the usual prompt course of the department will be adhered to in the present instance.

Amendment of the Pharmacy Act.

As a Government measure the Bill will have some chance of getting attention. This can scarcely be said in regard to the Pharmaceutical Council's Bill, which will be introduced as soon as possible. The Bill was printed in the *C. & D.* of March 9, 1901, page 384. It contains the following provisions:—

Each shop, whether owned by persons or corporations, to be (1) managed by qualified person, (2) registered, and (3) selling or dispensing in it must be done by registered person.

Corporations to be (1) managed by registered chemist director, and (2) not use titles.

Minor examination may be (1) divided, and (2) curriculum required.

Agencies for sale of poison unlawful.

Numerous details subsidiary to these exist in the Bill, which is an exceedingly complex measure. There is a chance of it being well backed, and we understand that Mr. Bremridge is now visiting various centres with the view to organising support to it or opposition to any inimical Bill which may be introduced.

Approaching M.P.s.

There is little to gain by writing to Members of Parliament at present about the subject of the hour. The draft Pharmacy Bill which is now "urgent" was not regarded with universal favour when it was published two years ago, but we daresay everybody interested is so sick of the whole business that the opposition to the Bill from trade ranks now will not be so great as it was then. We do not see what chemists and druggists can do at present more than speak to their M.P.s when they have the chance, or write to them in the following style:—

SIR,—I have reason to believe that, in the course of the present Session there will be one or more measures introduced into Parliament for the amendment of the Pharmacy Acts, so far as the sale of poisons is concerned. One of these measures has been drafted by the Pharmaceutical Society, which, as you may know, is the statutory authority appointed to administer these Acts on behalf of the public. In its Bill the Society is endeavouring to get

better means of ensuring that each shop kept open for the sale of poisons shall be in charge of a qualified person, as there is nothing at present in the law to enable the Society's representatives to ascertain where poisons are sold, and by whom. The Bill will deal with co-related subjects also. A second Bill is expected from the Privy Council as a result of the report of the Committee on Poisons. This Committee has recommended that the sale of certain poisons used in agriculture and horticulture does not require the qualified supervision entailed by the Pharmacy Act. One of these poisons is arsenic, which is the subject of a special statute. The Privy Council has on more than one occasion endeavoured to get Parliamentary sanction for measures to relax the restrictions on the sale of poisons, but has invariably failed. I propose, when the Government Bill is produced, to take the liberty to write to you again, but in the meantime I have thought it advisable to ask you to be so good as to reserve your opinion upon the question involved.

I am, yours, &c.,

Doctors' Shops.

A correspondence has been going on in the *British Medical Journal* on the question of the sale of poisons in open surgeries by unqualified persons. Dr. W. Bruce, Dingwall, the direct representative of Scotland on the General Medical Council, last week defended the action of the Council in stigmatising connivance at the habitual infraction of the law on the part of a medical practitioner as infamous in a professional respect. This week Dr. Brown, Govanhill, retorts that it is nothing but impertinence on the part of the G.M.C. to assist the Pharmaceutical Society in its administration of the Pharmacy Acts, and in so doing the Council is simply acting as a catspaw to the Society. Dr. Brown complains that the Pharmacy Act is ambiguous and sadly in need of revision, whilst legal decisions have altered to a great extent its meaning. Another correspondent, "M.D.," writes that it is impossible to keep within the reading of the Pharmacy Act in the Highlands, where there are no druggists, but apparently a plethora of medical men. "M.D." closes his letter with the statement that, "if chemists and druggists would keep to their legitimate business, and cease poaching on our domain by prescribing, then I think medical men in the West of Scotland would be able to close their open surgeries to-morrow." We are so used to such reference to counter-prescribing in the letters of medical men with a grievance that we can hardly accept any letters as genuine which do not contain some such complaint.

Belladonna-plaster Danger.

A correspondent in the *Lancet* calls attention to two cases in which emplastrum belladonnæ produced distinct blistering. In both cases the plaster came from the same maker, and, in response to an inquiry, the chemist who supplied the plaster was told that strong belladonna-plaster sometimes produces blistering. The question is asked as to whether other medical men have come across instances where belladonna-plasters have caused blisters. Leslie (Limited) inform us that they have made emp. belladonnæ for thirty years, and have only had two or three complaints, the last one ten years ago. They say that the component parts of the plaster need carefully blending, but it occurs to us that the formula of the B.P. 1893, containing 0.5 per cent. of belladonna alkaloids, may be at fault. The reputation of the plaster has been built up on a weaker article made from such a formula as that of the British Pharmaceutical Conference, and it is quite possible that the stronger plaster kept in close contact with a sensitive skin for long may cause blistering.

ERASIVE POWDER.—The *Pharmaceutische Zeitung* says that an excellent erasive powder consists of equal parts of alum, sulphur, amber, and saltpetre. In use it is only necessary to scatter some of the powder on the fresh ink-spot or writing that we wish to erase, and rub off with a bit of clean blotter or a clean rag. The ink vanishes completely.

Legal Reports.

Trade Law.

Orders from a Housekeeper.—At the Brompton County Court on February 16, Harrod's Stores (Limited) brought an action against Mr. H. N. Dorling, of Leeds, claiming 4*l.* 4*s.* in respect of toilet-requisites, &c., supplied to the order of "Mrs. Dorling." An order was received by the plaintiffs from Leeds from a person signing herself "(Mrs.) H. N. Dorling," and the goods in question were supplied in the ordinary way, but defendant refused payment on the ground that the person who ordered and received the goods was not Mrs. Dorling, and had no authority to pledge his credit. The defendant in the witness-box explained that the person who had represented herself as Mrs. Dorling was a former housekeeper of his. During the eighteen months she was in his employment he made her an allowance for household expenses, but forbade her to pledge his credit. Other people had supplied her with goods while she was passing as Mrs. Dorling, but he had no knowledge whatever of the orders until after the woman had left his service. He had come up from Yorkshire to defend claims of a similar character. Judge Stonor gave a verdict for the defendant with costs.

High Court Cases.

THE KODAK TRADE-MARK CASES.

THESE cases, which were adjourned last week (*C. & D.*, February 14, page 265) on the question as to whether the particulars should be amended as to prior use of the words "Bull's-eye" applied to films, were mentioned before Mr. Justice Swinfen Eady on February 18. Mr. Neville, K.C., intimated that the defendants did not think it desirable to ask for any amendment of particulars, but were quite content to leave the case where it stood.

No date was fixed for judgment.

KODAK (LIMITED) AND THE INCOME-TAX.

THIS case, referred to last week (*C. & D.*, February 14, page 265) is one in which in assessing Kodak (Limited) for income-tax the Commissioners held that (1) the American company was the business of Kodak (Limited), and that the profits and business of the American company were technically theirs; (2) that if the profits and business were not technically those of Kodak (Limited) the American company was merely their agent; (3) that Kodak (Limited) were the successors to both the prior English and American companies; (4) that Kodak (Limited) was liable for its profits made in America under Schedule D, Case 1.

Kodak (Limited) appealed to Mr. Justice Phillimore, sitting as a Divisional Court, and he held them not liable, on the ground that there was no evidence upon which the Commissioners could hold that the American company was carried on or controlled by Kodak (Limited).

Hence the present appeal by the Crown.

The hearing of this case, before Lord Justice Vaughan Williams, Lord Justice Stirling, and Lord Justice Mathew, was concluded on February 14 in the Court of Appeal.

The Court dismissed the appeal, on the ground that the respondent company had no right of control over the profits of the American company, but were simply shareholders, and that there was no relation of principal and agent or master and servant existing between the respondent company and the American company.

HAIR-SPECIALISM

MR. JUSTICE BYRNE on Friday, February 13, gave his decision in *Truefitt v. Edney*. It was a claim by Messrs. H. P. Truefitt (Limited), hairdressers and perfumers, 13 and 14 Old Bond Street, W., for an injunction to restrain Mr. C. J. Edney, who carries on a similar business at 1 Bond Street, from trading as hairdresser or hair-specialist under the name of "Truefitt." After a long hearing, Mr. Justice Byrne found that the defendant's predecessor in business, Mr. Walter Truefitt, had for some ten years before his death advertised his business as that of a hair-specialist. The defendant had purchased the business of Walter Truefitt and the goodwill and name thereof, and it was admitted by the plaintiffs that he was entitled to carry it on under the name of Truefitt, in the same manner as it had previously been carried on, with, of course, any necessary developments; so that the case had

narrowed itself down to the question whether the defendant was attempting to pass himself off as H. P. Truefitt, the hair-specialist, and thereby as carrying on the business of the plaintiffs. After examining and criticising the evidence on this point, his Lordship came to the conclusion that the alleged fraudulent representation had not been established. The action therefore failed, and was dismissed with costs.

Pharmacy Act, 1868.

MR. ALEXANDER CROSS, M.P., CONCERNED.

A PROSECUTION under the Pharmacy Act, which is exciting considerable interest in Scotland, has entered on its preliminary stages in the Glasgow Sheriff Court. It is at the instance of Mr. Richard Bremridge, Registrar under the Pharmacy Acts, 1852 and 1868 (with concurrence of the Procurator-Fiscal for Lanarkshire), against Messrs. Alexander Cross & Sons (Limited), seedsmen, 19 Hope Street, Glasgow, of which Mr. Alexander Cross, M.P. for the Camlachie Division of Glasgow, is head.

The charge bears that the respondents, Alexander Cross & Sons (Limited), 19 Hope Street, Glasgow, are "guilty of an offence within the meaning of the Act in so far as that, on February 6, within the said shop, 19 Hope Street, they did sell, contrary to the provisions of the 17th Section of the said recited Act, as amended by the Act to Amend the Pharmacy Act, 1868 (32 and 33 Vic., cap. 17), to Donald Matheson Gordon, residing at 4 Catherine Street, off Parliamentary Road, Glasgow, a poison within the meaning of Part I. of Schedule A of the Pharmacy Act, 1868—to wit, a quantity of arsenic, which, at the time when sold by them to the said Donald Matheson Gordon, formed an ingredient in a bottle of 'The Ballikinrain Ant-destroyer,' in respect (1) That the said Donald Matheson Gordon was a person unknown to the said Alexander Cross & Sons (Limited), and was not introduced by any person known to them; (2) that the said Alexander Cross & Sons (Limited), before delivery of said article, failed to make, or cause to be made, an entry in the book to be kept for the purpose, stating in the form set forth in Schedule F to the Pharmacy Act, 1868, the date of the sale, the name and address of the purchaser, the name and quantity of the article, and the purpose for which it was stated by the purchaser to be required, and likewise failed to have affixed to such entry the signature of said purchaser, and of the person, if any, who introduced him to them; and (3) that the said Alexander Cross & Sons (Limited) failed to label the said bottle distinctly with their name and address as the sellers thereof; whereby they became liable to a penalty of 5*l.* sterling."

The pleading diet will be held the day after this issue goes to press.

UNQUALIFIED ASSISTANTS.

F. DAWSON, who was fined at Bloomsbury County Court last week for selling poisons, he being unqualified, was described in our report as an assistant to Boots (Limited). This was our reporter's error for "Boutall," the poison having been sold in the shop of Mr. G. S. Boutall, chemist and druggist, 5 Green Street, W. We may add that Boots Cash Chemists (Southern) (Limited) inform us that they "place qualified chemists in each and every branch of their business," and the report of the Dawson case unjustly reflects upon them.

A Poor Hot-water Bottle.

DAMAGES CLAIMED, 800*l.*

AT the Nisi Prius Court of the Liverpool Assizes on Tuesday, February 17, Justice Walton and a special jury were occupied all day in hearing a case in which Philip and Anne Priest, a Liverpool draper and his wife, brought an action against Valentine Last, chemist, Holt Road, Liverpool, to recover damages for personal injuries. Plaintiffs alleged breach of warranty in the defendant selling goods (a hot-water bottle) unfit for the purpose for which they were sold, and, in the alternative, alleged negligence. Defendant denied that there was any warranty, either express or implied, and also denied negligence. Mr. Taylor, K.C., and Mr. Greer were for the plaintiffs, while Mr. Horridge, K.C., and Dr. Thomas appeared for defendant.

Mr. Taylor, in opening the case, said Mrs. Priest had

suffered very severe injuries as the result of the bursting of a hot-water bottle, which she had used for cramps in the stomach. The bottle was supplied by the defendant. On March 19 last Mrs. Priest asked her husband to get for her a hot-water bottle. Mr. Priest went to Mr. Last's shop to purchase the bottle required. He asked for an indiarubber hot-water bottle, and defendant produced two bottles, saying they were the only ones he had left. A lady standing at the counter remarked, "Surely, you are not going to put hot water in that?" The defendant replied that the bottles were perfectly fitted to contain hot water. The bottle was taken away by Mr. Priest, and was used that night, a Wednesday. It was used on the Thursday, the Friday, and the Saturday. On the Sunday night Mr. Priest filled the bottle three-parts full of water "just on the boil," and took it up to his wife. A few moments later he heard loud screams, which roused the people next door, and on going to his wife he found that the bottle had burst. Mrs. Priest was very severely scalded about the breast and back. She suffered intensely, and required great attention for a long while. The violent pain she suffered brought on a miscarriage, and Mrs. Priest had to go to her parents' house, and heavy expenses were incurred. No doubt it was hard on the tradesman selling such an article for a small price being made defendant in an action for serious damages. The bottle (said counsel) was made of inferior materials, being a mixture of oil substitutes with the indiarubber. The oil substitutes had dried up, and the indiarubber mixture was left very thin and frail.

Mr. Philip Priest then gave evidence. He paid 3s. 6d. for the bottle, and asked at the time whether it would stand hot water. Before the defendant had time to reply, a lady standing at the counter said, "Why, you are not going to put boiling water in that, are you?" Defendant said, "Why not? Of what use would they be if they would not stand hot water? Certainly they would stand hot boiling water." When not in use the bottle was hung behind the door in the kitchen. On the Sunday night he made a fire, and when "the kettle began to sing," he filled the bottle three-parts full of water, which had not quite boiled. Mr. Priest described how he took the bottle up to his wife and what followed. He saw Mr. Last on the Monday, and told him of the affair, and went back again on the Thursday.

Cross-examined by Mr. Horridge, plaintiff denied having told defendant that he did not want an expensive bottle. Defendant did not tell him not to fill it to the top, or not to use boiling water, and it was not in consequence of this latter instruction that the lady in the shop interposed.

Mr. Horridge: Did not Mr. Last say it would certainly not stand boiling water, but if properly used would answer the purpose?

Plaintiff: No, he did not. Continuing, plaintiff stated that each night he filled the bottle on the rug in front of the fireplace. The bottle was emptied every morning after use, and was never hung up full of water. He claimed 51% for special damages and 750% for general damages.

Mrs. Priest deposed to the accident, and stated that she was in bed for six weeks. She was very badly scalded, and even yet felt the effects of the scalding. She could not properly look after her husband and her children at the present time as the result of the bursting of the bottle. The bottle was never quite filled with water, nor was it hung up full of water.

Dr. Stock, of Edge Lane, stated he attended Mrs. Priest. He considered that her life was endangered for some days as a result of the shock she sustained from the scalds. He saw the bottle, and considered that the rubber had perished. His fees for attending Mrs. Priest would amount to 22%. She was still badly scarred, and had not yet fully recovered.

Mr. George E. Heyl Dix, a graduate of the University of Berlin, and consulting expert for the St. Helens Cable Company, deposed that he had analysed a portion of the water-bottle, and found that it contained 56.6 parts of solid pigments or minerals, 14.6 parts of substitutes made of oils for the purpose of adulteration, and 25.8 solid parts, which might contain a slight quantity of pure new rubber, but which consisted of a greater part of what is known in the trade as "crumbs." The "crumbs" were made by grinding down old rubbers, and were used chiefly in the manufacture of cheap rubber goods. The "crumbs" were held together by new pure rubber, so that the manufactured article appeared

on the surface to be coherent. The bottle which burst contained "crumbs," and should not have been sold without a distinct understanding that it should not be used for hot water.

In reply to a jurymen witness said the mineral pigments would cost 1d. a pound, and the oil substitutes from 4d. to 6d. a pound. Pure rubber for that class of goods would cost about 4s. An English manufacturer would not turn out an article such as that produced.

Mr. George Hughes, mackintosh-manufacturer, of Paradise Street, Liverpool, said he would not sell a hot-water bottle of the material like that produced.

This closed the case for the plaintiff.

In opening the case for the defendant Mr. Horridge, K.C., said that he was a chemist in a small way of business in a poor district. It was impossible to sell an expensive class of bottle, and the bottles such as that sold had been found useful if used with care as hot-water, and not boiling-water, bottles. The defendant had stated definitely when he sold the article that it was not to be used for boiling water, but simply as a hot-water bottle. The lady who was present in the shop at the time the bottle was purchased had not been found. He would call the assistant to Mr. Last and a customer named Jenks, who were present in the shop at the time, and these witnesses would state what they heard. The defendant told Priest definitely that the bottle should not be filled, neither should boiling water be used; the bottle was only for hot water. Which was the more likely story—the story told by the defendant or the story told by the plaintiff? With regard to the warranty alleged, it was not the wife's purchase at all, but the husband's, and no cause of action could be sustained. He would call evidence to show that the bottle was of good quality, and that it had become deteriorated by being filled with boiling water from a kettle in front of the fire. The bottle had been filled in this way for four nights in succession. He submitted that the bottle had been exposed to the heat of the fire, and that boiling water was poured into it. The claim for 750% was outrageous under the circumstances.

Valentine Last, the defendant, stated that he was a chemist in business in Holt Road. He had been a chemist on his own account for nearly six years. He denied the accuracy of the account of the conversation at the time of the purchase of the bottle given by the plaintiff. He denied having stated that the bottle was fit to hold boiling water. He purchased the bottle from Messrs. Jackson's in School Lane, Liverpool, a reputable firm. He paid 2s. 6d. for it, and sold it at 3s. 6d. He did not know until afterwards that the bottle was of American manufacture. He bore out counsel's statement with regard to what he told Priest when he purchased the bottle that it was for hot water only and not for boiling water. Mr. Priest, when he purchased the bottle, said he wanted it for a special purpose, but he did not say what that special purpose was.

Cross-examined by Mr. Taylor: He had only two hot-water bottles in stock at the time of the purchase. He and his assistant had tested both of them for leakage up to a temperature of 160° F. He had not notified Messrs. Jackson of an intention to make a claim against it. That firm was not supporting him in the matter, nor was the Chemists' Defence Association. He stood entirely alone.

Harry Foulds, assistant to Mr. Last, corroborated as to testing the bottles, and also as to the conversation which passed between Mr. Last and Mr. Priest when the plaintiff purchased the bottle.

Similar evidence was given by Mr. Jenks, a customer, who also corroborated the plaintiff as to the instructions that the bottle was a hot-water, and not a boiling-water, bottle.

Mr. Charles Jackson, a member of the firm from whom the bottle had been purchased, said the bottles were obtained through Messrs. Siebert & Co., of London, but they were of American manufacture. His firm had sold about 140 of these bottles in the Liverpool district, but he had never heard of one bursting. Mr. Jackson, the other member of the firm, gave similar evidence.

Mr. Walter Wild, manager of the Liverpool Rubber Company, and an expert in English and foreign makes of hot-water bottles, said the quality of the rubber bottle produced was good enough for hot water. He had never known a bottle to burst. There was no such thing as a

pure-rubber bottle on the market. Pure rubber was no use at all; pigment was necessary.

By a Juror: No properly made bottle should burst if three-parts full of water short of boiling-point.

Cross-examined: He would not, as an expert, make a bottle without using canvas in its constitution. It was safe to use canvas.

Shown a bottle similar to the one which burst, and questioned by the Judge, witness said that was a very serviceable bottle.

Examined by Mr. Horridge: Such a bottle ought not to burst if properly used.

Mr. Stevenson, manager of the Northern Rubber Company, with twenty years' experience, said he was asked by plaintiffs' side in the first instance to report upon the bottle. He said it was extraordinary that the defect in the bottle could not be shown. He had never known of a split going in a bottle of that description in the way this one had. The bottle showed signs of having been subjected to great heat or of having been brought into contact with some oily substance.

Other witnesses deposed to having used similar hot-water bottles with safety for a number of years.

This closed defendant's case, and counsel addressed the jury.

His Lordship, in summing up, reviewed the evidence at some length, and put a number of questions to the jury.

The jury retired, and on returning found that the defendant did not tell the plaintiff when he bought the bottle that it was fit to use with boiling water; they also found that the bottle was not fit for use as a hot-water bottle, and that it burst in consequence. On the question whether there had been negligence on the part of the defendant in selling the bottle for the purpose for which it was sold, they did not agree. They awarded plaintiffs 40% for expenses and 100% as compensation.

His Lordship pointed out that the 100% would probably depend on the point as to whether the defendant had been negligent in selling the bottle.

The jury again retired, but after a lengthy absence were still unable to agree and were discharged.

On Wednesday, February 18, before Mr. Justice Walton, the case was mentioned by Mr. Horridge, K.C., who, on defendant's (Mr. Last) behalf, remarked that at some future date the question would be argued as to whether a warranty was involved in the sale. Mr. Taylor, K.C., who represented the plaintiffs (Mr. Priest and his wife, Anne Priest) agreed. His Lordship assented.

Dentists Act.

TEMPLAR MALINS NOT "SPECIALLY QUALIFIED."

THE Cardiff Stipendiary (Mr. T. W. Lewis) gave his decision on Friday, February 13, in a case in which Templar Malins, chemist and druggist, Queen Street, Cardiff, had been summoned for having unlawfully used a description implying that he was a person "specially qualified" to practise dentistry. On Mr. Geo. David, who prosecuted on behalf of the British Dental Association, making his appearance in Court, the Stipendiary said he would not detain him, and at once announced that he dismissed the summons on the facts.

Sale of Food and Drugs Acts.

IRON PILLS.

At North London Police Court on Friday, February 13, Mr. George Templeman, chemist and druggist, 68 Devonshire Road, Holloway, was summoned for selling, to the prejudice of the purchaser, iron pills deficient to the extent of 63 per cent. in ferrous carbonate. Mr. A. M. Bramall appeared for the prosecution, and Mr. Kirby for the defence.

Mr. Bramall said the defendant had asked that the third portion of the sample taken should be sent to the chemists at Somerset House for analysis; he (Mr. Bramall) did not propose to go further that day than proving the purchase of the pills and identifying the various portions of the sample.

Mr. Kirby said he would like to know if Somerset House would be asked to take into consideration the coating of the pills, because he was told that the coating was a sub-

stantial part of the element which was said to be missing in these pills. If the coating was not counted in by the analyst, there was all the difference.

Mr. Fordham (the Magistrate): The coating as well as the pill goes down the throat.

Mr. Kirby: Yes. But the query is as to whether the Islington analyst, when conducting his investigation, considered the coating as well as the pill.

Mr. Fordham: I have heard of gilding the pill; and, to my mind, the gilt would be a substantial part of the pill. (Laughter.)

Mr. Bramall: The British Pharmacopœia says that 1 gr. of ferrous carbonate—

Mr. Fordham: I shall know all the details, I suppose, after Somerset House have reported upon the matter.

Mr. Bramall called Inspector Ward to prove the purchase, but

Mr. Kirby said he would admit this, and also that the certificate produced related to a portion of the sample taken. But he would like to know if his Worship thought the coating of the pill as well as the pill itself was material to the issue?

Mr. Fordham: Undoubtedly. The coating of the pill, and the pill itself—the entire pill, in fact—should be taken into consideration by the analyst.

Mr. Bramall: I don't know whether or not your Worship will add that, when all was considered, it should then be according to the standard laid down by the British Pharmacopœia?

Mr. Fordham: I will see what Somerset House says, and then I will consider what the British Pharmacopœia says.

Gazette.

Partnerships Dissolved.

Anderson, D. H., M.D., and Alexander, G., M.B., under the style of Anderson & Alexander, Barrow-in-Furness, surgeons, &c.

Dobbs, M., and Wilson, A. G., under the style of Drs. Dobbs & Gordon Wilson, physicians and surgeons.

Lowe, G. M., and Thomson, J. S., under the style of Lowe & Stiff Thomson, Lincoln, physicians and surgeons.

Skinner, G. A., and Leader, H., under the style of Skinner & Leader, Sheffield, general medical practitioners.

Bankruptcies and Failures.

Re E. H. HASSELBY, lately in business at St. Leonards-on-Sea, Chemist and Druggist.—The Official Receiver of the Brighton Bankruptcy Court reports that he has completed the realisation of this debtor's estate. After meeting the preferential claims and the costs, he is prepared to pay to the unsecured creditors a first and final dividend of 10% in the pound.

Re JOHN WHITE, 75 Masborough Street, Rotherham, Chemist and Druggist.—A sitting for the public examination of this debtor was held last week at Sheffield, when, in examination by the Official Receiver, debtor stated that his failure was due to insufficient capital, sickness in the home, and keenness of competition. In the year 1880 he commenced business at his present premises, and he executed a deed of assignment in 1895. His liabilities at that time amounted to 291*l.* 4*s.* 2*d.*, and dividend was paid of 5*s.* in the pound. The estate was purchased by some friends, and he carried it on for a time as their manager, but again took over the business in June, 1901. He was without capital, but took it at the price it cost his friends while it was in their hands. Ultimately the debtor was allowed to pass his examination.

New Companies & Company News.

W. L. PARKINSON (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on by W. L. Parkinson at 62 Dale Street, Liverpool, and to carry on the same and the business of photographic-mount manufacturers and dealers, makers and vendors of photographic materials and accessories, photographers, manufacturers of chemicals and electrical and optical goods, &c. No initial public issue. The first directors are C. Tyler and W. L. Parkinson. Registered office, 62, Dale Street, Liverpool.

BARBOUR'S PREPARATIONS (LIMITED).—Capital 15,000*l.*, in 1*l.* shares (7,500 preference). Objects: To adopt an agreement with Corders Trust (Limited) for the acquisition of the business of R. J. Barbour and to carry on the business of manufacturers of blacking, dubbins, boot-polishes, &c., manufacturers of medicines, lotions, washes and powders, tanners, indiarubber manufacturers, chemists, druggists, &c. The first subscribers are:—H. Allanson, H. F. Knight, A. J. Delahaye, H. M. Johnson, W. J. Reynolds, E. Jacques, and A. T. Green. No initial public issue. The subscribers are to appoint the first directors. Qualification of subsequent directors, 5*l.*. Remuneration, 25*l.* each per annum and a share in the profits. A. T. Green is the first secretary. Registered office, 334 Goldhawk Road, Hammersmith.

YORKSHIRE CHEMICAL AND ESSENCE COMPANY (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of druggists, dysalsters, makers of and dealers in chemicals, essences, drugs and patent medicines, importers of essential oils, mineral-water manufacturers and dealers, hop merchants and growers, malt-factors, &c. The first subscribers are:—J. Townend, Bourne House, Morrison Street, Castleford, mineral-water manufacturer; M. Waters, 73 Albion Street, Castleford, glass-house manager; T. Roberts, Churchfields, Glass Houghton, Castleford, cashier; T. E. Townend, Bourne House, Morrison Street, Castleford, mineral-water manufacturer; W. H. Pipe, Maltby Terrace, Castleford, traveller; T. Charlesworth, 2 Glenfield Street, Blackley, Manchester, essence distiller; and Mrs. A. Charlesworth, 2 Glenfield Street, Blackley, Manchester. No initial public issue. The first directors are T. Charlesworth (managing director) and others to be appointed by the subscribers. Qualification, 5*l.*. Remuneration of managing director, 109*l.* 4*s.* per annum. Registered office, 1 Carlton Street, Castleford, York.

BOOTS CASH CHEMISTS (EASTERN) (LIMITED).—A dividend at the rate of 12 per cent. per annum on the ordinary shares is declared, and the usual dividends on the preference shares of this and the Western, Lancashire, and Southern companies.

JOHN OAKEY & SONS (LIMITED).—The directors propose a final dividend of 5 per cent. for the half-year ended December 31 last, and a bonus of 2½ per cent., making 12½ per cent. for the year, to pass 7,000*l.* to reserve (making that fund 59,734*l.*), and to carry 571*l.* forward.

W. B. FORDHAM & SONS (LIMITED).—The accounts, after provision has been made for depreciation, &c., enable the directors to recommend a final dividend at the rate of 6 per cent. per annum for the half-year ended December 31 last, making, with the interim dividend already paid, 6 per cent. for the year.

"SANTAS" COMPANY (LIMITED).—The directors recommend the payment of a final dividend of 4½ per cent. and a bonus of ½ per cent., making, with the interim dividend already paid, a total distribution for the year ended December 31, 1902, of 7½ per cent. per annum. The sum of 500*l.* has been placed to depreciation account, and 1,500*l.* to reserve fund, 2,157*l.* 0*s.* 11*d.* being carried forward.

IRISH COMPANIES.—The number of new companies registered in Dublin during January was twelve, with capital amounting to 144,500*l.*, as against four, with a capital of 53,000*l.*, in December, and eight, with capital amounting to 55,500*l.*, in January, 1902. The list includes Cahir Pharmacy (Limited), with a capital of 300*l.*, in 1*l.* shares, and the Dublin Glass-bottle Company (Limited), capital 20,000*l.*, in 1*l.* shares.

ALFRED BIRD & SONS (LIMITED).—The report for 1902 states that the profit for the year, after making full provision for contingencies, amounts to the sum of 38,674*l.*, which, with the balance of 9,616*l.* brought forward from last year, makes a total of 48,291*l.* The directors propose to appropriate this amount as follows: Preference dividend for the year, 7,039*l.*; dividend of 12½ per cent. on the ordinary shares, inclusive of interim dividend (3,750*l.*) already paid, 18,750*l.*; to carry to the reserve fund, 10,000*l.*; to carry forward to next year, 12,502*l.*

BLUNDELL, SPENCE & CO. (LIMITED).—At the annual general meeting held last week, the Chairman (Mr. Edward Dixon), in moving the adoption of the report, regretted that the results of the year had been again disappointing, and that they were not able to recommend a larger dividend than 6 per cent. There was no falling-off in either the volume or quality of the business, and there were decided indications of future increase in the sales of their specialities. The

depreciation on the value of linseed oil alone accounted for a loss of about 8,000*l.* The resolution was seconded and carried.

A. MILLAR & CO. (LIMITED).—The report for the year ended November 30, 1902, states that after making due allowance for bad debts, depreciation, &c., and providing for directors' fees, the net profit, including the balance of 2,873*l.* brought forward from last year's account amounts to 13,754*l.* After the payment of interim dividends, a balance of 8,822*l.* is available for distribution. The directors recommend that this should be applied to the payment of a final dividend on the ordinary shares equal, with interim dividend already paid, to 10 per cent. per annum, 4,921*l.*; addition to general reserve account, 750*l.*; carrying forward to next account, 3,150*l.*

BITTER-"SWEETS."

As quinine-wine is made with orange-wine, which comes within the definition of "sweets," a sweets-licence will suffice for its sale by those who are not chemists and druggists, as shown by the following letter, addressed on February 14 by the Excise Department to a firm of wholesale druggists:—

GENTLEMEN,—In reply to your letter of the 27th ultimo, I am directed by the Board of Inland Revenue to acquaint you that there would be no objection to the sale of quinine-wine by persons holding a sweets-licence, so long as the basis of the wine is 'British wine' or sweets.

I am, Gentlemen,

Your obedient Servant,

J. P. BYRNE

(Assistant Secretary).

For a sweets-retailer's licence, costing 25*s.* a year, a magistrate's certificate is necessary in England and Scotland, but not in Ireland, while the sweets-dealer's licence (5*l.* 5*s.* annually) may be obtained without a magistrate's certificate. Another wholesale house has obtained the assurance of the Board that a quinine-wine containing not more than 2 per cent. of proof spirit may be sold without a licence; naturally, for such a liquor is not excisable, nor is it "quinine-wine," and its sale may bring retailers into trouble, either under the Sale of Food and Drugs Act or the Merchandise-marks Act.

Metropolitan Asylums Contract Forms.

A common form of tender for drugs is to give a percentage of discount upon the prices quoted in a printed list. This is the custom of the Poor-law Guardians in Ireland and of the Metropolitan Asylums Board, but the Irish lists are revised so frequently that their prices approximate fairly to current wholesale rates. On the other hand the Metropolitan Asylums Board prices appear to bear very little relation to current wholesale rates. The following examples will suffice to show this:—

Higher.			Lower.		
	s.	d.		s.	d.
Pulv. acaciæ ...	2	6	Chloroform ...	2	0
Bals. tolu. ...	2	4	Ext. cannab. ind. ...	1	10
Calcii hypoph. ...	4	6	Canada bals. ...	2	0
Ext. hyoscy. virid. ...	11	6	Menthol ...	11	6
Hexamethylenetetram. ...	1	4	Ol. anthem. ...	3	0
Pulv. ipecac. ...	13	6	Pot. bromid. ...	2	2

These are the prices specified in the form for next week's tender. It will be observed that those in the first column are much higher prices than are at present current, while those in the second column are the opposite. In fact, an influential wholesaler tells us that the ratio of profit to him on the first column lot would be 57 per cent., while the second column articles would involve him in a loss of 38 per cent. Wholesale druggists have to consider seven pages of such items as these, amounting together to 882 articles, and by some means or other they have to hit upon an all-round discount. How they manage to do this without converting themselves into suitable inhabitants for one of the Board's spacious mansions we cannot understand. The Board should really take counsel with some pharmaceutical experts with a view to bringing their tender forms up to date.

IPECACUANHA PLANTS to the number of 63,000 were growing in the Calcutta Botanic Gardens in 1875. How many are there now?



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Carriage of Ether.

A useful concession has, we understand, been obtained through *Mr. Thos. Tyrer's* instrumentality as to the carriage of ether. Until now, subject to the 5s. minimum for carriage, ether could not be sent in other containers than Winchester quart bottles or tins—and only four bottles in a case—although the limit was 28 lbs. of ether. Henceforth, any sized bottles or tins securely stoppered, not exceeding $\frac{1}{2}$ gallon in capacity, and luted or sealed can be included in a package. The quantity of ether in a package carried under this condition must not exceed 28 lbs., nor the gross 100 lbs. Carriage must in all cases be prepaid. The regulation will read thus:—

In luted and tied-over stoppered bottles, each containing not more than $\frac{1}{2}$ gal., or in hermetically sealed tins, securely packed in sawdust in cases or casks of sufficient strength, each case or cask containing not more than 28 lbs. of ether, and the gross weight per package not to exceed 100 lbs.

The trade will appreciate Mr. Tyrer's efforts which have resulted in this concession that druggists especially will benefit by.

Degeneration and Regeneration.

SIR,—I sympathise, to a great extent, with the views expressed by your correspondent "A Country Chemist." Some of the older men have told me that the original intention was to make the Minor examination the assistants' qualification, and the Major the standard for the fully qualified pharmacist. Be that as it may, there is much to be said for the idea in present-day conditions. A modified Minor should be introduced taking special cognisance of practical requirements, and anyone who has passed it should be qualified to act as an assistant, to the extent of selling poisons and dispensing prescriptions. The present Minor with some alterations (especially more time to practical chemistry) might well be made the Major, and everyone attaining the full qualification would become a pharmaceutical chemist. In the case of limited companies, at least one of the acting directors should be required to possess the full qualification.

Yours, &c.

Edinburgh, February 16.

D. B. DOTT.

Why he Won.

SIR,—Will you please allow me space in *THE CHEMIST AND DRUGGIST* to point out the advantage of being a member of the Chemists' Defence Association?

In the case taken against me under the Dentists Act, and decided in my favour last Friday, the defence was put before the stipendiary by Mr. Kirby, solicitor for the Association, in such a manner that he could not help but see that it is no crime for a chemist to do dental work, but really part of his business. I am convinced that but for the help of the Association on this occasion the dentists would have scored again.

Yours faithfully,

Cardiff, Feb. 17.

TEMPLAR E. MALINS.

[The Secretary of the C.D.A. informs us that Mr. Malins has given a practical turn to his gratitude in the shape of a donation of 2l. 2s. to the funds.]

Edinburgh Chemists' Shops.

SIR,—I am obliged to "Metropolis" for pointing out an error in my address. What I meant to say was that in Edinburgh chemists' shops had increased in greater ratio than the population. With reference to the comparison he makes, figures can sometimes be made to prove too much. Chemists'

businesses are not all of one size. Then, again, in Edinburgh dispensing is done by chemists. I am afraid this is not generally the case in London. I am, yours, &c.,
Edinburgh, February 10. W. S. GLASS.

Mr. White's Shaving-cream.

SIR,—I note with interest the experience of "Ph.C." (202/55), as stated in your correspondence-column. When the formula for Mr. Edmund White's aseptic shaving-cream was first mentioned in the *C. & D.* I received a sample of same from one of my colleagues, who had prepared a small quantity. Instead of swearing by the preparation I felt more inclined to swear at it, but failure was probably due to the unsatisfactory way in which my colleague prepared the sample. He confessed that he did not like the look of the preparation when he had finished it, so I shall be glad if you can inform me, through the column or otherwise, where I can find the formula, so that I can prepare some of this aseptic shaving-cream for trial.

Very truly yours,

A. J. P. (211/73.)

The improved formula is as follows:—

Hard paraffin (m.-p. 55° C.)	...	22 parts by weight
Prepared suet	...	3 parts by weight
Soft soap	...	2 parts by weight
Boiling water	...	68 parts by weight

Place these materials in a vessel surrounded by boiling water, and when the fats are melted beat them together until a smooth, white emulsion is obtained. Continue the beating, maintaining the temperature above 70° C., and shake in gradually—

Tragacanth in powder ... 2 parts

When the mixture is homogeneous, allow it to cool by removing the boiling water, and when nearly cold add—

Glycerin	...	2 parts
Oil of lavender	...	1 part

Association Reform in Liverpool.

SIR,—I am pleased to see, judging from the address of the new President, that the Liverpool Chemists' Association shows signs of descending from its lofty pedestal of science, to discuss trade questions. The President says that "they claim to be both a scientific and trade association," but hitherto there has been a superabundance of the scientific to the detriment of the trade questions, which will I think account to a great extent for the further statement that "comparatively few of the younger members of the trade in business belong to the Association." It is hardly reasonable to expect men who have only a few leisure hours weekly to spend them in discussing the best methods for estimating the amount of alkaloids in *Curcas purgans* or some other unearthly drug. Exercise for the brain is very good in its way, but chemists as a rule get more than their share, and, in addition to advancing their trade interests, desire a few hours for their bodily welfare also. Most of the other associations attend to these points, but, as "Xrayser" remarked a few months ago in commenting on the Liverpool Chemists' Association, "until recently the only frivolity in which the Association indulged was an annual *conversatione* at which they dispensed lemonade and tea (vide *C. & D.*). Now, I believe an annual dinner takes its place." With regard to the statement that the price-list should be an excellent nucleus for combination, I should like to point out that to the majority it is useless as a price-list.

Yours truly,

OVERDOSE. (208/41.)

Stores and Assistants.

Xylem (218/49) writes to say he thinks the indoor system so common in the trade has driven, and still is driving, qualified assistants to the stores. The indoor system leads to a shortening of mealtimes. "If chemists," *Xylem* adds, "really want to stop the companies from trading, the best thing they can do is to put their own house in order first, and commence by giving up the indoor system."

SIR,—Will you allow me to tell Mr. W. S. Glass that I have laboured for years in the attempt to unite the assistants throughout the country in defence of their own interests, but for want of support am giving up the attempt in disgust? To me it is plainly evident they have no wish to be united.

They prefer to fight their cause singly and fail. Considering that the future of pharmacy is in their hands, it is marvellous they do not see their folly. I sincerely trust the subject will be raised by every association and action taken, or pharmacy will for ever pass from our hands.

Yours faithfully,

52 Acacia Road, N.W.

C. E. PICKERING.

SIR,—I should like to endorse the remarks made by "One of Boot's Managers." Not very long ago I disposed of my business and sought a position as manager. Through your journal I advertised and answered advertisements—but the salary offered was only small. I had no inclination for the road, and a friend suggesting the stores, I wrote to Mr. Boot—received a prompt reply, had an interview, and was very soon settled in charge of a branch, which has progressed under my management. Both the salary and treatment are in great contrast to that I have experienced from the ordinary chemist. From my experience on both sides I am convinced that if a man has a fair capital and will work on modern competitive lines, he can hold his own in our business, as in others; but the man whose capital is limited and is in business for himself, has a smaller net income, enormously less comfort, has more of the stress and worry of business, is obliged to work for longer hours, and in every way has a less comfortable position than he would have as manager with our firm.

Yours faithfully,

THEION. (221/4)

SIR,—Your correspondent "One of Boot's Branch Managers" admits that the chemist with but small capital has gone by the board, mainly, I presume, through the unqualified competition, and yet in his concluding remark he is proud to be a manager of the class that is crushing his weaker brother out of existence. Is there no common sympathy in our ranks, no little self-sacrificing spirit between men who have studied together and undergone the trying ordeal of the examination-room side by side? Turning to the question of remuneration, I acknowledge that, in many cases, the store manager may be better paid at present; but if we look a little into the future, the prospects to me do not seem so bright. The chemists that are in business, having their profits reduced by the unqualified competition, cannot afford to pay good salaries, and in many cases will have to work their businesses single-handed; whereas, if the qualified man did not assist the stores, those salaries could be bettered in their own ranks. The country is being rapidly covered by the unqualified store companies, and soon there will be no room for a qualified man to open a pharmacy on his own account, but he will have to work for the stores for a living; there will eventually be a glut of qualified men for the stores, and the latter will be able to dictate their own terms. The qualified will become the humble servant of the unqualified capitalist, and the way of the capitalist is frequently hard—very hard too, if times are bad. I contend that if the qualified men did not assist the stores, it would not be many years before chemists were in a better position, both financially and socially.

Yours truly,

Harrogate, February 16.

A. ATKINSON.

Legal Queries.

Consult "The Chemists' and Druggists' Diary," 1903, before formulating Queries.

212/31. *Hats*.—(1) Your circular beginning "The great tooth question" may bring you into trouble, but as you are a limited company you may make it difficult for the British Dental Association to prove a case against you personally. The two cards also contain matter implying special qualification, but in these cards the name of the limited company is solely used, and companies are outside the Dentists Act. (2) Your tenant has no right to make any structural alteration on the premises without your authority, and if the board over the window is of that nature he is liable in damages to you.

212/36. *Nemo*.—(1) If the qualified manager of a branch shop takes an order for poisons, and executes it himself, either directly to a customer or through an errand-boy, he commits

an offence under Section 15 of the Pharmacy Act. The fact that the poison has been obtained ready packed and labelled at the main establishment, with the name and address of the principal on it, does not alter the unqualified manager's liability, but the principal becomes liable under Section 17 for improper labelling, as the address of the branch shop where the sale takes place should be upon the package. (2) It is legal for a chemist and druggist to send a poison by an errand-boy to a customer's house. (3) It is legal for an unqualified branch manager to take an order for a poison, which order is to be executed at the main establishment and sent from there to the purchaser's house. This principle was decided in the case of the Pharmaceutical Society v. White. The conditions of the sale at the main establishment must strictly conform with Section 17.

212/70. *J. T.*—Can a dentist registered under the Dentists Act as practising dentistry in connection with pharmacy, although not registered as a retail chemist, dispense scheduled poisons, or is he exempt from Act of 1868 or on the same footing as medical men? [No. A dentist has no more privilege under the Pharmacy Act than the man in the street. The Pharmaceutical Society never interferes, however, with dentists who supply poisons to their own patients.]

212/62. *W. L. W.*—As to the privileges of unqualified persons under the Dentists Act, see the legal section of our Diary, and Legal Reports in our issue of February 14.

214/6. *A. A.*—(1) You will find full particulars in regard to the registration of trade-marks in THE CHEMISTS' AND DRUGGISTS' DIARY. We do not think the name of your powders will be registered because it is descriptive, but it should be registered as a device. (2) If you are certain that the thyroid-gland tablets contain nothing but the desiccated gland, they can be sold unstamped as a remedy for human ailments.

208/59. *Assistant*.—An employé introducing into a business new preparations from formulæ of his own, not devised in the course of his employment, cannot be compelled to divulge the recipes without a consideration. If the formulæ are entered in the shop recipe-book they are to that extent the property of his employers. If the names under which the preparations have been sold by his employers are associated with the assistant's own name, he may have good ground for restraining them from using his name after he leaves their employment, but much depends upon the consideration given to the assistant when he was engaged.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

212/26. *W. R. B.*—*Digestive Syrup*.—We quote the following from "Pharmaceutical Formulas," page 605:—

Pulv. boracis	...	...	...	9j.
Pulv. gentianæ	...	...	...	9j.
Pulv. capsici	...	...	...	gr. ij.
Ol. gaultheriæ	...	...	...	gtt. xiv.
Ol. sassafras	...	...	...	gtt. x.
Dec. aloes co. conc.	...	...	...	3ij.
Succ. taraxaci	...	...	...	3ss.
Spt. rectificat.	...	...	...	3ij.
Theriac. ad	...	...	...	3iv.

Rub the powders together, and upon them gradually pour the oils dissolved in the spirit, then add the decoction, triturating constantly, and next the juice. Transfer to a measure, add treacle to 4 oz., and mix. Dose: A teaspoonful.

211/72. *Kappa*.—*Phosphorised Cod-liver-oil Emulsion*.—In making this use acacia and tragacanth for emulsifying—namely, 6 dr. of powdered acacia and 2 dr. of tragacanth to a pint of phosphorised cod-liver oil. The phosphorised oil is most easily made by dissolving 1 gr. of phosphorus in 1 oz. of chloroform, and adding 30 minims of this and the same of spirit of peppermint to the cod-liver oil before emulsifying. Add the oil gradually to the

powdered gums contained in a large mortar, then add 5 oz. of water, well mix, and follow by 15 oz. more of water added gradually. Each ounce of this emulsion will contain $\frac{1}{10}$ gr. of phosphorus, which strength is sufficient for general administration. Dose, one teaspoonful to a tablespoonful twice or thrice daily. The emulsion may be sweetened with elixir of saccharin and coloured with cochineal or fuchsine if desired.

211/52. G. W. F. (Mossel Bay).—(1) Caspari's "Pharmacy," 19s. (Kimpton), or "The Art of Pharmacy" (THE CHEMISTS' AND DRUGGISTS' DIARY, 1898), are good practical works on pharmacy. (2) Wall's "Dictionary of Photography," 7s. 6d. (Hazell, Watson & Viney), has good monographs on photographic chemicals. (3) The most recent edition of Martindale's "Extra Pharmacopoeia" is the tenth, published in 1901; of Squire's "Companion" the latest edition is the seventeenth, published in 1899.

200/24. Citadel.—The process of bleaching cotton-seed oil—the crude oil being red—is to agitate with a solution of salt and then partially saponify with a warm weak solution of caustic soda. The particles of soap formed enclose the colouring-matter, and are removed by a centrifugal machine. The saponification causes a loss of about 5 to 8 per cent. of oil, and in another process this is partially avoided by the use of sodium carbonate to remove the colouring-matter, and subsequent agitation with fullers' earth.

208/61. R. W. B.—(1) All three weed-killers given in "Pharmaceutical Formulas" require diluting. (2) Water-proofing-cloth.—See *C. & D.*, February 22, 1902, page 319.

212/61. Musieus.—Dry-shampoo.—See *C. & D.*, February 22, 1902, page 319, or May 17, page 779.

208/37. T. J. J.—*Alecoolat de Fioravanti* is official in the French Codex. It is made by macerating the following ingredients, in coarse powder, for four days: Bay-berries, 20 grams; galangal, ginger, zedoary, cinnamon, cloves, nutmeg, of each 1 gram; alcohol (80°), 600 grams—then adding Venice turpentine, 100 grams; elemi, tacamatrac, amber, storax, galbanum, and myrrh, of each 20 grams; aloes and dittany of Crete, of each 10 grammes. Macerate for two days, and distil on a water-bath till 500 grams of distillate is obtained. The preparation is also called *Baume de (or Balsamum) Fioravanti*.

217/61. Jonquil.—(1) See page 474 of "Pharmaceutical Formulas" for elixir glusidi *vel* saccharini. (2) Impure sodium-salicylate solution becomes black in presence of free alkali. The trace of cresotic compounds in the salicylate is the cause.

217/55. J. C. II.—We have obtained further information in regard to daumin, and will give you the agent's address on application.

217/44. C. E. W.—In the case of two registered chemists starting in business together as equal partners—one, however, taking the entire management, and the other only attending the shop occasionally—the net profits, after payment of all expenses (including interest on capital), should be equally divided. A fair basis of personal remuneration would be, in the case of the working partner, the house rent free *plus* a weekly allowance to make the annual salary about 150% (the usual figure for a manager). The second partner's occasional services might be paid at the rate of 10s. a day.

210/32. Varnish.—(1) **Straw-hat Varnish:**—

Orange shellac	...	...	...	7 lbs.
Sandarac	...	...	...	2 lbs.
Resin	...	...	...	$\frac{1}{2}$ lb.
Copal spirit-varnish	...	...	...	1 pint
Spirit	...	...	...	1 gal.

Dissolve, and colour with spirit-soluble aniline dyes in the proportion of 1 oz. to the gallon.

(2) **Violet Rubber-stamp Ink:**—

Methyl-violet...	...	...	...	3ij.
Spirit	...	...	...	3ij.
Water	...	...	...	3vj.

(3) **Balsam of Honey**, cough-mixture for children, is a mixture of equal parts of syrup of tolu and clarified honey.

The original balsam of honey was a spirituous solution of tolu and storax, and contained opium, and hence is not suited for children. (4) The "quantity" of Battle's vermin-killer entered in the poison-book is taken to refer to the price of the packet sold. (5) **Nit-pomade.**—See *C. & D.*, February 7, page 251. (6) The spirit is added to the formula for nursery-lotion ("Pharmaceutical Formulas," page 91) for the double purpose of dissolving the essential oils and preserving the lotion from fermentation.

213/31. Pimento.—The average salary of qualified men of eight or nine years' experience in the West-end is about 60% indoors, and 120% to 150% outdoors. A few are paid more.

204/41. Thomas.—Essence of Peppermint is no longer official, so that the more usual strength of 1 in 8 can be safely sold. Ess. menth. pip., B.P. 1835, was a theoretical preparation, and stronger than the article sold for domestic use.

206/61. Inquirer.—The moulds for cutting lozenges are supplied by sundries-houses such as Maw's.

218/64. Cigarette.—There is no book published on tobacco-flavourings, but formulæ have been given in the *C. & D.* at various times. Some recipes, supplied to us by an expert, are given in "Pharmaceutical Formulas," page 437.

213/15. Vivum.—**Blackening Iron.**—The dull black of "art" ironwork is given by making the object red hot and quenching in oil. Another process of blackening iron consists in painting it over with solution of sulphur in turpentine—made by boiling together sulphur $1\frac{1}{2}$ oz. in turpentine 15 oz.—and heating over a Bunsen or spirit flame.

214/6. A. A.—The whole plant of *Lobelia inflata* contains about 1 in 500 of lobeline. The seeds contain at least twice as much alkaloid as the whole plant. The chemistry of lobelia is not yet, however, on a satisfactory basis.

215/30. Carica.—Commercial terebene is a well-known article, and is comparatively inexpensive.

190/40. B. L. B. (Calcutta).—(1) **Methyl-blue** is prepared by the sulphonation of triphenyl-*p*-rosaniline, formed by heating pararosaniline with aniline in the presence of benzoic acid. You could not prepare it on a small scale profitably. (2) **Books on Pyrotechny.**—Kentish's "Pyrotechnist's Treasury," 2s. 6d. (Chatto); Col. Ross's "Pyrology; or, Fire Chemistry," 25s. (Trübner). (3) **Imitation Ivory.**—Many formulas have been proposed for this, but celluloid and xylonite now hold the field.

197/22. W. K.—We do not know Douillet's process for purifying oils; could you tell us if it is a recent method or the subject of a patent?

210/48. E. W. P.—(1) In **Transpositions of Spectacle-lenses** the dispenser is allowed a certain amount of liberty as long as the resulting strength is the same as that ordered, but in all cases the simplest bi-spherical lens should be used. The anomalies you have noticed are due probably to the small stock of lenses carried by the optician who supplied the glasses, but are quite unjustifiable. (2) **Periscopic lenses** are considered an improvement on simple forms of spectacle-glasses, as they enable the wearer to see more clearly in the lateral movement of the eyes. Bi-spherical lenses are used in preference to plano-spherical lenses, as they are less expensive.

215/32. Nomen.—Ping-pong balls are made from sheet celluloid, and moulded by heat.

219/1. Alpha.—(1) **Egg-preserving.**—Sodium-silicate solution is diluted in the proportion of 1 to 9 of boiled water, and the eggs covered with the liquid. (2) We are inquiring about the poison-book. (3) Thanks for the old labels; we hope to reproduce some of them later on.

212/69. Nemat.—First test the lavender-water, to see if the dark colour is due to iron or iodine; if the former, filtration through magnes. carb. will destroy the colour, but

FOR HIMSELF.—An amusing story appeared in a recent issue of the *Drogisten Zeitung* illustrative of the thoroughness of Japanese officialdom. It appears that recently the police of Kobé distributed to every house in town a package of arsenic, with directions for use printed on each package, the poison to be used in the destruction of rats in accordance with the plan of the Department of Health in fighting the plague. A very prominent citizen of Kobé, and a political leader of some note, on the day after the distribution was made, called at the office of the Kobé *Chronicle* and lodged a complaint to the effect that he had been grossly insulted by the police. According to his account, a police officer on the previous day had walked into his dwelling, and without a word handed him a package marked "Arsenic." "What is that?" asked he. "That's for you," answered the officer. "For me?" inquired the astonished citizen. "Yes—for—you," repeated the policeman, pausing after each word to emphasise it. "The order has gone forth that all vermin shall die!"

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: February 19.

BUSINESS has been fairly brisk this week, but the alterations do not include anything of special importance. Cod-liver oil continues to rise on the spot, but matters in regard to the fishing do not appear to improve. Turkey opium has advanced, owing to higher prices in Smyrna and the tenacity of holders here. The new Persian Customs tariff, which was to come into force on February 14, shows an increase in the export-duty. Morphine has a firmer tendency in sympathy with opium. Quinine opened the week at firmer prices, but closes rather easier. At the auctions of first-hand drugs a fair proportion of the goods offered were disposed of, the following being the alterations of interest: Zanzibar and Curaçao aloes sold at full prices. Sumatra benzoin was steady. Cardamoms sold irregularly, but dearer. Cascara sagrada was firmly held. Guaiacum is cheap; and Jamaica honey of good quality brought higher prices. Rio ipecae., with orders from the United States, ruled steady; but Cartagena was 2*d.* lower. Menthol sustained a drop of about 1*s.* 6*d.*, and likewise Japanese dementholised oil on sales "without reserve." Privately, however, these low prices would not be accepted, and, according to the latest reports from Japan, the market will in all probability further advance. Rhubarb was very quiet; Lima-Jamaica sarsaparilla sold steadily; grey Jamaica and Tinnevely senna were not offered. Beeswax sold at full-up prices for East Indian, and firmer for Jamaican. The following table shows the principal fluctuations of the week:—

Higher	Firmer	Easier	Lower
Gran. parad. Oil, cod-liver Opium Potashes Shellac Wax (Japanese)	Cardamoms Cloves, Zan. (delivery) Dandelion Honey (Jamaica) Morphine Oil, aniseed, star Wax, bees' (Jam.)	Ipecacuanha (Cartag.) Jalap Pepper, black	Cassia lignea Menthol Oil, pepper- mint

Java Quinine=exports.

The exports of quinine from Java during December, 1902, amounted to 576 cases (206,800 oz.), about 470 of which were shipped to the United States, the remainder being divided between Japan, Hong-Kong, and Singapore. From January 1 to December 31 the shipments have been:—

	1902	1901	1900	1899	1898
Cases	1,986	2,255	1,921	1,600	1,172

Fortified Lime or Lemon=Juice.

A General Order (¹²/₁₀₀₃) has been issued by the Board of Customs, directing that for the future, lime or lemon-juice fortified in bond under the provisions of the code may be exported as merchandise in casks containing not less than 9 gals. in place of 20 gals. as hitherto.

Commercial Sale-rooms Benevolent Fund.

The annual meeting of donors and subscribers to this fund was held on February 16 at the London Commercial Sale-rooms, Mr. H. Melvill Woodhouse presiding. The report for 1902, which was taken as read, stated that there was a falling off in the donations and subscriptions amounting to 330*l.* as compared with the previous year, while the grants have increased more than 40*l.* During the year thirteen subscribers died and twenty-one members of the "Rooms" discontinued their subscriptions. Subscriptions amounting to nearly 40*l.* are in arrear, but some of these will doubtless be recovered during the present year. On the other hand, the committee have received 15*l.* 15*s.* in new subscriptions, but the applications for assistance continue to increase, and the grants have exceeded the annual subscriptions by 125*l.* Recently two of the recipients died, but one fresh applicant was accepted, the number on the books at present being twenty-one. The Chairman, in moving the adoption of the report and balance-sheet, referred to the falling-off in the subscriptions, and urged that every member of the "Rooms" ought to do something for the fund. Those who were subscribers should induce others, especially the new members, to become subscribers. Mr. H. W. Price, he regretted to say, had resigned the trusteeship, and his reason for so doing was that, as he was not so frequently in the "Rooms" as formerly, he was not in touch with the younger members. Mr. Howard Figgis had, however, kindly consented to take his place, and he would no doubt make an able treasurer. It was suggested that they should hold a smoking-concert, probably in the West-end, in order to benefit the fund, and the Chairman hoped the idea would meet with a favourable reception. The report was unanimously adopted, after which the auditors were re-elected. Mr. Andrew Devitt, Mr. J. F. Firth, and Mr. R. Grey were re-elected to serve on the committee; and Mr. H. W. Price and Mr. Arthur Thompson were elected members. Votes of thanks were accorded to the committee and Chairman.

Heavy Chemicals.

There is a continued fair inquiry in the heavy-chemical market for both main and miscellaneous products for home and export. Values show very little material fluctuation, being for the most part steadily maintained at late rates.

ALKALI PRODUCE.—Bleaching-powder in average request, with prices still low, and varying from about 3*l.* 15*s.* to 4*l.* 10*s.* per ton free on rails, with 5*s.* per ton extra for f.o.b. Tyne or Liverpool. Caustic soda, all strengths, continues to move steadily, and late rates are maintained: 70 to 77 per cent., 10*l.* 10*s.* to 10*l.* 12*s.* 6*d.* per ton; 70 per cent., 9*l.* 15*s.* to 9*l.* 17*s.* 6*d.* per ton; and 60 per cent., 8*l.* 15*s.* to 8*l.* 17*s.* 6*d.* per ton. Ammonia alkali in brisk demand and firm, at 4*l.* 10*s.* per ton, free on rails at works in bags. Bicarbonate of soda unchanged, at 6*l.* 7*s.* 6*d.* to 6*l.* 15*s.* per ton, in large casks, and 6*l.* 15*s.* to 7*l.* 2*s.* 6*d.* per ton f.o.b. Liverpool in 1-cwt. kegs. Soda-crystals in steady demand at 62*s.* 6*d.* and 67*s.* 6*d.* per ton, f.o.b. Tyne and Liverpool respectively. Salt-cake very quiet, and shows no improvement, prices ranging from 17*s.* 6*d.* to 20*s.* per ton, in bulk, f.o.r. Chlorates of potash and soda, although still very quiet, are perhaps a shade better in tone: potash 2½*d.* to 2½*d.* per lb., and soda 2½*d.* to 3*d.* per lb. Yellow prussiates of potash and soda in moderate demand only, at 5½*d.* per lb. for the former, and 3½*d.* to 4*d.* per lb. for the latter. Sulphate of soda (Glauber's salts) moving steadily at unaltered figures of 27*s.* 6*d.* to 32*s.* 6*d.* per ton, in bags, f.o.r. Hyposulphite of soda in good demand and steady in price, 6–8 cwt. casks 5*l.* 5*s.* to 5*l.* 15*s.* per ton, f.o.r. or f.o.b., 1-cwt. kegs 6*l.* to 7*l.* 10*s.* per ton, in accordance with quality and quantity. Silicates of soda in steady demand for home and export, at unaltered values of 140° Tw. 4*l.* 2*s.* 6*d.* to 4*l.* 12*s.* 6*d.* per ton; 100° Tw. 3*l.* 12*s.* 6*d.* to 4*l.* 2*s.* 6*d.* per ton; and 75° Tw. 3*l.* 5*s.* to 3*l.* 15*s.* per ton, f.o.b. Tyne or Liverpool, in usual casks.

Liverpool Drug-market.

Liverpool, February 18.

CASTOR OIL.—Good seconds Calcutta has eased off slightly, owing to slackness of demand, and sales are being made at 2½*d.* to 2¾*d.* per lb. First-pressure French is held for the same price; second-pressure 2½*d.* to 2¾*d.* The forward quotations are fully maintained.

CANARY-SEED.—Much steadier, and 70*s.* per qr. is asked for good bright. A large arrival is being held off the market.

TURPENTINE.—Unchanged at 44*s.* per cwt., and higher prices expected.

BEESSWAX.—Four packages Peruvian of mixed quality realised 7*l.* 7*s.* 6*d.* per cwt. and several packages Chilean medium to good quality have sold at from 7*l.* 10*s.* to 7*l.* 15*s.*, the article being much firmer. Fourteen packages of Sierra Leone in store have been reported sold at 6*l.* 16*s.* 3*d.* per cwt.

CALABAR BEANS.—Eleven bags just arrived sold at 1*s.* 1*d.* per lb., and 17 bags at 1½*d.*, ex quay.

BALSAM COPAIBA.—Two barrels cloudy Maranhão just arrived changed hands at 1*s.* 9½*d.* per lb.

GUM ACACIA.—The business passing is of a retail character, and values remain unchanged.

QUILLAIA.—Notwithstanding the recent easy tendency, owners have stiffened up, and sales are reported at 18*l.* per ton.

SULPHATE OF COPPER.—Easing down considerably, and, after touching 23*l.*, has dropped away to 22*l.* to 22*l.* 10*s.* per ton.

TONKA BEANS.—Further sales of frosted Pará are reported at 1*s.* 3*d.* per lb.

German Drug-market.

Hamburg, February 17.

Business is quiet at present, and transactions in drugs are few in number.

AGAR-AGAR is firm, at 285*m.* to 300*m.* per 100 kilos., according to quality.

BALSAM PERU is quiet, at 10*m.* per kilo.

CAMPHOR (REFINED) is unchanged, at 425*m.* per 100 kilos.

CONDURANGO is steady, at 95*m.* per 100 kilos.

CUMIN-SEED.—*Mogadore* is quoted 40*m.*, and *Maltese* 45*m.* per 100 kilos.

CITRIC ACID is firmer, at 225*m.* per 100 kilos.

ERGOT is quiet, but firm, at 280*m.* per 100 kilos.

GALANGAL is much firmer, at 35*m.* per 100 kilos.

IPÉCACUANA.—Rio is quoted 13½*m.* and Cartagena 9½*m.* per kilo.

LYCOPODIUM.—Fairly large quantities have been sold at about 475*m.* per 100 kilos., in cases.

MENTHOL.—On the spot, 55*m.* per kilo. is asked.

QUININE shows a fair business, at 37*m.* per kilo.

SENEGA.—Western is firm, at 825*m.* to 850*m.* per 100 kilos.

WAX, JAPANESE, is firm, at 118*m.* per 100 kilos.

OILS, FIXED.—Castor is very firm, first-pressing in barrels being quoted at 46*m.* and forward delivery 45*m.* per 100 kilos. Cod-liver is very strong, with non-congealing oil quoted 300*m.* to 320*m.* per barrel. Linseed for spot delivery is very scarce and dearer.

OILS, ESSENTIAL.—Star-anise is firmer, at 10½*m.* per kilo. Peppermint (HGH) is firm, at 19*m.* per lb., spot.

Cablegrams.

HAMBURG, February 19:—Western senega is firmer at 850*m.* per 100 kilos. Japanese wax and cevadilla-seed are also firmer at 120*m.* and 105*m.* per 100 kilos, respectively. American HGH oil of peppermint is quoted 19*m.* per lb.

SMYRNA, February 18:—The opium-market is advancing owing to the severe cold weather. Buyers are paying 7*s.* 6*d.* per lb. for manufacturing descriptions, and, with few sellers, price is expected to go to 8*s.*

SMYRNA, February 19:—The opium-market has advanced to 8*s.* per lb. for druggists', and still higher prices are looked for.

NEW YORK, February 19:—Business here is brisk. Opium is higher at \$2.90 per lb. Quinine has a hardening tendency at 26*c.* per oz. Cod-liver oil has advanced to \$60 per barrel, and peppermint oil is easier at \$4.65 for bulk. Menthol is also easier at \$7.15 per lb. Damiana is firmer at 10*c.* Buchu at 27*c.* per lb. is easier, and Japanese wax is advancing, 13*c.* per lb. being asked.

ACID, CITRIC.—Firm at 1*s.* per lb.

ACID, TARTARIC.—English on the spot is quoted 1*s.*, and foreign 11½*d.* to 11¾*d.* per lb.

AGAR AGAR.—A cable received in London from Japan states that the crop is expected to be three-quarters of an average one, and that buying has commenced.

BALSAM CANADA remains scarce at 2*s.* per lb. for cases.

BROMIDES.—We learn from our New York correspondent, under date of February 3, that the recent offer of small lots of European potassium bromide at 22*c.* has been withdrawn, and the trade is waiting developments. In certain quarters the idea is prevalent that the St. Louis concern bought a white elephant when they purchased one of the trust factories, and that they will be forced to terms.

BUCHU.—According to official figures furnished us by the Controller of Customs, Cape Town, the exports of buchu during 1902 amounted to 161,570 lbs., valued at 4,755*l.*, against 220,306 lbs., valued at 5,665*l.*, in 1901.

CANARY-SEED exhibits a steadier tone, and more business has been done lately than for some time past. The quotation for Turkish on the spot is 61*s.* to 62*s.* per quarter.

CINCHONA.—The auction to be held at Amsterdam on February 26 will consist of 4,823 bales and 412 cases Java

cinchona, weighing 479,221 kilos., and containing 25,887 kilos. (900,000 oz.) of quinine sulphate. The manufacturing-bark contains an average of 5.86 per cent. quinine, against 5.45 per cent. for the January auction, and an average of 5.51 per cent. for the ten auctions held at Amsterdam in 1902. In addition 48 bales South American bark, weighing 1,719 kilos. and containing 35 kilos. q.s., will be offered. The shipments from Java during the first half of February amounted to 341,000 Amsterdam lbs. (or 375,000 English lbs.), against 320,000 Amsterdam lbs. in 1902 and 525,000 Amsterdam lbs. in 1901. In the drug-auctions a parcel of 32 serons of Loxa quill sold at 11½*d.*, with one lot at 9½*d.* per lb.

COCA-LEAVES are obtainable at 9*d.* per lb. for good green Truxillo.

COCOA-BUTTER.—The auction to be held at Amsterdam on March 3 will consist of 75 tons Van Houten's, 40 tons Bensdorp, 20 tons Helm, 16 tons de Jong, 9½ tons Mignon, and 3 tons foreign brand, while on the same date in London 100 tons of Cadbury's brand will be offered.

COPPER-SULPHATE is firm at from 20*l.* to 23*l.* 10*s.* per ton, spot, according to brand. In Liverpool 22*l.* 10*s.* to 23*l.* 10*s.* is quoted.

In a report on the trade of Venice during 1901-02, issued from the Foreign Office this week, the British Consul states that several manufactories of sulphate of copper have been started in Italy, and there is an important one at Padua. British, German, and American sulphates are also imported. Although foreign sellers claim their sulphates to be 98 to 99 per cent., they cannot compare with the British products of the best marks. Competition with foreign makes could be easily overcome (says the Consul) by selling small shipments to the agricultural committees ("Comizi Agrari") through some responsible person on the spot. Agriculturists frequently object to buy from local merchants, who naturally want to dispose of their sulphates at higher prices. The quotations should be moderate and firm. Samples should be forwarded, through the representative, to all the "Comizi Agrari" in the different districts, giving prices in francs, and offering to send them trial lots, granting credit, if necessary, as the "Comizi" are corporate bodies.

GAMBIER.—Good free cubes are now held at 42*s.* per cwt.

GAMBOGE.—The exports from Singapore to Great Britain amounted to 108 piculs last year, against 36 in 1901, 50 in 1900, 192 in 1899, 232 in 1898, and 226 piculs in 1897.

GRAINS OF PARADISE are dearer at 52*s.* per cwt.

GUM ARABIC.—Fair to good palish sifted Karachi has been sold at 24*s.* to 25*s.*, medium ditto, partly sifted 22*s.* 6*d.* to 23*s.*, and good ambery pickings 17*s.* 6*d.*

IODINE.—The production of crude iodine in Japan last year is estimated by our Yokohama correspondent at from 130,000 lbs. to 150,000 lbs.

MENTHOL.—In auction, 5 cases of Kobayashi crystals sold, without reserve, at from 20*s.* 9*d.* to 21*s.* 3*d.*, and 2 cases at 21*s.* 6*d.*, being a decline of about 1*s.* 6*d.* on the spot price. It is reported from Kobe that the present stocks of raw peppermint oil (mixed oil) in Japan are estimated at about 13,000 lbs., which would mean about 100 cases dementholised peppermint oil and about 100 cases menthol. This very small quantity has to last until the new crop is due, which is about the end of October.

Our Japanese correspondent writes on January 23, that menthol is still quoted 14.50 yen per catty nominally, but this high price has prohibited business. There is practically no demand from abroad at present, but some merchants are said to have received orders from Europe at 13 yen per catty, which figure has been refused. Holders expect a further advance ere long.

MORPHINE has a firmer tendency, owing to the advance in opium. In small wholesale quantities 4*s.* is quoted for hydrochloride powder.

OIL, ANISEED STAR, has a firmer tendency, with sellers at 4*s.* 3*d.*, spot.

OIL, CITRONELLA, has a firmer tendency at from 9½*d.* to 10½*d.* per lb., spot for commercial Ceylon.

OIL, COD-LIVER.—There has been a fair amount of activity on the London market owing to the offers of parcels from the United States, and it is reported that over one hundred barrels have been sold at up to 275*s.* per barrel, spot terms, for non-congealing oil, principally *Jervell's* brand. There was an offer of new oil at 300*s.*, c.i.f., early in the week,

but such offers are not taken seriously, and to-day 260s., c.i.f., is quoted for March-April shipment. From Glasgow we hear that a firm of agents have been instructed to advance their price for 1902 oil from 250s. to 275s. per barrel. Our Bergen correspondent writes on February 14 that another week has passed without any regular fishing having taken place, stormy weather having prevented the boats from going out. The official reports regarding the fishing contain no figures so far, and until they do so there is nothing of interest to telegraph. There are reports of offers up to 300s. per barrel, f.o.b., for a few barrels of non-congealing oil. The exports from Bergen to date amount to 434 barrels, against 1,014 barrels at the same time last year. It is interesting to note that at this time last year the total catch of cod amounted to 2,240,000, and 75s. per barrel, f.o.b. Bergen, was quoted for non-congealing oil. In the drug-auctions, 10 casks of Newfoundland were bought in at 8s. per gal.; 6s. 6d. was intimated as being the last price at which business was done.

In the course of a report issued by Messrs. H. Meyer & Co., of Christiania, dated February 12, it is stated that various steamer expeditions, arranged by the Government and private persons, have put out to sea to find the whereabouts of the cod, and some have been discovered several miles off the Lofoten islands. This is regarded as a hopeful sign that they will collect at their spawning-grounds later.

OPIMUM.—The London market for Turkey has advanced about 6d. to 9d. per lb., which prices have restricted business. Good Smyrna druggists' opium is now quoted 8s. to 8s. 6d., and some seconds druggists' have been sold at from 7s. 3d. to 7s. 6d. Persian has quieted down after the improvement noted last week. The new Persian Customs tariff has advanced the export duty on opium to 2 toman per batman, which is equivalent to about 1s. 2d. per lb. This duty went into force on February 14.

CONSTANTINOPLE, February 13.—Recent reports to the effect that the plants have suffered considerably by frost were not without foundation, and the latest news, which is now confirmed, is that the whole crop has been destroyed both in Asia and Salonica. In the circumstances the recent hardening in prices is quite justified, and we would not be surprised to see values much higher ere long. Spring sowings have now commenced, but these cannot, under most favourable circumstances, yield more than 5,000 to 6,000 cases. Taking all things into consideration, opium at present prices appears to us to be perfectly safe and well worth buying. The week's sales amount to 15 cases druggists', at 6s. 10d. to 6s. 11d., and 19 cases "soft shipping," at 8s. 6d. per lb., f.o.b.

PHENACETIN.—*Bayer's* is quoted 3s. 6d. per lb. for 5 cwt. lots.

POTASHES are scarce and dearer. First Montreal are quoted 29s. to 30s., and first American 28s. Pearls are quoted 41s. per cwt.

QUININE.—The moderate bark shipments for the first half of February imparted a firmer tone to the market early in the week, and small quantities of German sulphate in bulk have changed hands at 1s. 0½d. per oz., but later 1s. 0½d. was accepted.

SPERMACEIN.—American is offered at 1s. 0½d. spot.

SPICES.—At auction on Wednesday bold native cut Cochin *Ginger* was bought in at 75s. per cwt., and small at 48s.; cut ends sold at 40s. European "C" was bought in at 50s. Small rough was bought in at 35s., boldish Calicut brown rough at 45s., and small at 41s. per cwt. Jamaica partly sold at 38s. 6d. to 39s. per cwt. for dull dark, and at 40s. 6d. to 42s. 6d. for dull washed. Zanzibar *Cloves* steady; good bright sold at 3½d. per lb. The market for delivery is firmer at 3½d. for June-August. Unpicked Penang sold at 7½d. per lb. "subject"; fair picked were bought in at 10d. per lb. Good red East African *Chillies* sold at 31s. per cwt.; Japan rather mixed faded at 28s., and good long picked red at 26s. per cwt. *Pimento* partly sold at 2½d. per lb. for fair, being steady. *Cassia-lignea* sold at 39s. 6d. per cwt., with one lot at 39s., for ordinary, packed with small. Twiggy broken sold at 19s. 6d. per cwt., with one lot at 20s. *Cassia-vera* was held for 25s. per cwt. Washed *Mace* was bought in at 2s. 6d. per lb. for medium pale, and at 2s. 3d. for small. Wild Bombay was withdrawn at 6½d. to 7d. per lb. Black *Pepper* rather easier; fair Singapore sold at 5½d. per lb. Good Wynaad partly sold at 6½d.; good Lampong was bought in at 6d. per lb. Singapore is steadier for arrival at

5½d. to 5¾d. per lb. Fair Singapore white sold at 9½d. per lb., good being bought in at 10½d. Dull Penang sold at 8½d. per lb., being lower. The next quarterly auction of *Cinnamon* will be held on Monday, the 23rd. inst.

STICKLAC.—Sifted Siam is quoted for arrival at 77s. c.i.f.

TARAXACUM.—Prices have advanced owing to scarcity, best English root being quoted 38s. and foreign at 32s., and cut at 42s. per cwt.

TURMERIC.—Madras has been in better demand lately, good to bright Rajapore having been sold at 12s. to 13s., and fair Calicut description at 11s. Split Cochin bulbs are quoted 9s. c.i.f.

London Drug-auctions.

	Offered	Sold		Offered	Sold		
Accroides	151	...	0	Hyoscyamus	39	...	0
Aloes—				Jalap	6	...	6
Curaçao (boxes)	38	...	38	Menthol	17	...	7
Socotrine	30	...	0	Musk-seed.....	1	...	0
Zanzibar	57	...	40	Myrrh	15	...	0
Ajowan-seed	50	...	0	Oil—			
Areca	38	...	38*	cajuput	13	...	0
Balsam—				camphor	12	...	0
Canada	1	...	0	cassia	20	...	0
Copaiba	15	...	10	citronella	3	...	3
Bears' galls.....	1	...	0	clove	1	...	1
Benzoin—				cod-liver (Newf.)	10	...	0
Sumatra.....	136	...	32	eucalyptus	42	...	15
Palembang	35	...	0	lime (W.I.)	1	...	1
Calumba	15	...	15	peppermint (Jap.)	35	...	30
Camphor	27	...	0	rose (E.I.)	8	...	0
Cantharides (Russ.)	2	...	0	Orange-peel	32	...	0
Cannabis indica ...	30	...	0	Rhubarb	38	...	3
Cardamoms	168	...	107	Sarsaparilla—			
Cardamom shells...	50	...	0	Lima Jamaica ...	48	...	48
Cascara sagrada ...	135	...	0	Seedlac	29	...	29
Cashew nuts.....	7	...	0	Soap-nuts	30	...	0
Cinchona	66	...	32	Strophanthus	53	...	0
Coca leaves	6	...	6	Tonka-beans.....	8	...	0
Cumin-seed	30	...	10	Wax (bees')—			
Dragon's-blood.....	12	...	4	East Indian	50	...	32
Ergot	29	...	8	Jamaica	6	...	6
Guaiacum	8	...	2	Morocco	10	...	8*
Gum acacia	9	...	0	Nyassaland	1	...	0
Honey—				Spanish—			
Jamaica	38	...	10	(bleached)	11	...	0
Ipecacuanha—				West Indian	1	...	1
Cartagena	8	...	8	Zanzibar	38	...	0
Rio (natural)	25	...	11				
("cult.")	9	...	9				

* Sold privately.

ALOES was in good demand, and for a parcel of Curacao very full prices were paid, 38 boxes selling at 22s. for good liver, slightly coarse, 18s. for fair ditto, and 15s. 6d. to 16s. 6d. for mixed and dull livery, and 16s. for black Cayey. Of Zanzibar, 21 cases sold at 65s. for good hard hepatic, and 30s. for hard drossy and mixed; 5 cases of Zanzibar in skins sold at 42s. subject for common skinny, and for 10 cases of soft liquid and black in spirit cases a bid of 28s. is to be submitted. A parcel of good, stiff, bright Socotrine of good flavour was limited at 72s. 6d. per cwt.

The exports of Cape aloes from Cape Colony during 1902 amounted to 300,757 lbs. (2,040%), against 368,503 lbs. (1,955%) during 1901. These figures have been obtained from the office of the Controller of Customs, Cape Town.

ARECA.—Good sound Ceylon was held at 21s., but 1s. less was afterwards accepted privately.

BALSAM COPAIBA.—Five cases of Cartagena sold at 1s. 6d. to 1s. 7d. per lb. for thin to cloudy opaque, and 1s. 4d. for bright thin balsam. Five other cases of bright thick had been sold privately at 1s. 8d.

BENZOIN.—Prices were fairly steady, Sumatra selling at from 7l. 5s. to 7l. 7s. 6d. per cwt. for good fair almondy seconds. Good medium seconds sold at 6l. 17s. 6d., and ordinary thirds, 4l. 17s. 6d. Fair glassy Palembang was held at 36s. per cwt.

CALUMBA.—Dark, rough, and stemmy sorts sold at 13s.

CANNABIS INDICA.—Tops continue to be sold privately at 3s. 6d. per lb.

CARDAMOMS.—The demand showed some improvement on the last auctions, prices being very steady and in some in-

stances rather dearer. Ceylon—Mysore, bold pale long, partly open, sold at 2s. 9d.; long pale bright, 2s. 8d.; medium and bold pale, 2s. 2d.; medium size pale bright smooth, 2s. 1d.; bold medium pale, 1s. 7d. to 1s. 8d.; small and medium pale, 1s. 6d.; small pale bright, 1s. 5d.; small pale, 1s. to 1s. 2d.; light shelly, 1s.; brown and splits, 11d. to 1s.; bold pale splits, 2s. 3d.; medium splits, 1s. 6d.; small splits, 1s. 1d. Decorticated seed sold at from 1s. 3d. to 1s. 5d., and 9 cases were limited at 1s. 6d. per lb.

CASCARA SAGRADA.—A lot of 115 bags was limited at 85s., and for a small lot of 20 bags of 1901 crop 57s. 6d. was wanted.

COCA LEAVES.—Brownish Ceylon sold at 5½d. per lb.

CUMIN SEED.—Good clean Maltese sold at 24s. per cwt.

DRAGON'S BLOOD.—For very good native picked lump of bright colour 9l. was wanted, and four cases of medium lump sold at 7l. 17s. 6d.

The exports from Singapore to Great Britain during 1902 amounted to 162 piculs, against 101 in 1901, 224 in 1900, 227 in 1899, 118 in 1898, and 99 piculs in 1897.

ERGOT.—Six bags bold Spanish returned as being damp sold without reserve at 1s. 2d. to 1s. 3d., and of 11 bags of Russian two sold at 1s. 3d. per lb. for fair clean sound.

GUAIACUM.—For fair glassy block 9½d. was refused, and for slightly drossy 9d. was paid.

HONEY.—Jamaica rather dearer, good thick white in barrels selling at 23s. 6d. per cwt., and for several other small lots bids were made and refused.

IPECACUANHA.—The quality of the Rio offered was better than usual, and a fair proportion of it sold, principally for export to the United States, at very steady prices. Fair bright natural partly native picked Rio sold at 6s., and a bale of fine was afterwards disposed of privately at 6s. 2d. Nine bags of so-called cultivated Rio, shipped from Bahia, and said to have grown in the State of Minas (Brazil), sold at from 5s. 9d. to 5s. 10d., the weight of each bag being unusually small. Cartagena was a trifle easier, eight bags of fair selling at from 3s. 10d. to 3s. 11d. per lb. The s.s. *Atrato* from Cartagena has arrived with eighteen packages.

JALAP.—Small to medium Vera Cruz tuber sold without reserve at 5½d. per lb., no tract or discount.

OIL, CASSIA, was limited at 3s. 3d. for 81 per cent. to 82 per cent. c.a.

OIL, CITRONELLA.—Guaranteed pure Ceylon (Umney's analysis) realised 1s. per lb.

OIL, EUCALYPTUS, B.P., sold without reserve at 1s. 3d. per lb. For *Magnet* brand (68 per cent. cineol), this figure was refused.

OIL, LIME.—A case of West Indian distilled sold at 1s. 2d.

OIL, PEPPERMINT.—The state of the market may be judged from the fact that three parcels of Japanese demethylised oil, involving 35 cases, were offered "without reserve," and practically all sold as follows:—Fifteen cases Kobayashi brand at 7s. 11d. to 8s. 1d. per lb., the bulk being sold at 8s. This is a decline of about 1s. 9d. on previous quoted rates. There is nothing further to be had at these prices, and since the sale 9s. to 9s. 6d. is asked privately. American H.G.H. has been reduced to 17s. 6d. net, and good Wayne County also 17s. 6d. in importers' hands.

RHUBARB.—Quiet, only three cases being disposed of publicly, at 1s. 7d. per lb. for medium round Canton with three-quarters good pinky fracture, one-quarter grey. Good flat orange-coated high-dried, with 80 per cent. pinky fracture, was taken out at 9d. There is now a good stock of high-dried, recent arrivals being mainly of this description. Shensi remains very scarce.

SARSAPARILLA.—The feature of this drug was the offering of 48 packages Lima-Jamaica, the only description catalogued. It sold with competition at from 1s. to 1s. 1d. per lb. Privately Mexican is quoted 3½d., c.i.f., and Honduras 1s. 4d. to 1s. 5d. per lb. spot.

SEEDLAC.—Rather dusty and blocky Madras scabs realised 99s. to 100s. per cwt.; blocky ditto, 91s., and dust, 40s.

STROPHANTHUS.—Fair greenish seed mixed with brown were taken out at 3s. 3d. and brown at 2s. 3d. per lb.

TONKA BEANS.—Angosturas were limited at 3s. per lb., and good black-frosted Para at 1s. 5d., with red and foxy at from 11d. to 1s. Fair Para are quoted at 1s. privately, and Surinam at 1s. 9d. per lb.

WAX, BEES'.—"Full up." Jamaica is still scarce, and the small lot offered sold with competition at 8l. 10s. for good bright red and brown mixed, and 7l. 10s. for brown. East Indian wax was in demand, Bombay of yellow and mixed colours, partly drossy, selling readily at 6l. 10s. Fair bright pale yellow to mixed brown Mozambique rolls brought 6l. 15s. Good bright red Morocco has been sold privately at 6l. 7s. 6d. to 6l. 10s. per cwt.

Cinchona and Quinine.

IN their annual review of cinchona and quinine during 1902 (dated February 6), Messrs. C. M. & C. Woodhouse give some interesting statistics regarding the position of these products. It is unnecessary to trace the course of the markets last year, as they were fully dealt with in the market movements in our issue of December 27. The prominent facts in regard to the series of tables given in the circular, are: (1) that the world's supply of bark is increasing; (2) that the consumption and distribution of quinine are also increasing; (3) that the percentage of quinine in the manufacturing bark is higher than hitherto; (4) that the output of Java quinine is less. We quote the more important of the figures, which represent English lbs:—

	1898	1899	1900	1901	1902
Ceylon, exports	976,000	619,000	510,000	601,000	407,000
E.I., exports ..	3,090,000	2,407,000	3,421,000	1,818,000	2,020,000
Java, exports ..	16,539,000	15,616,000	15,827,000	16,542,000	17,153,000
U.K., imports ..	5,143,000	3,742,000	4,604,000	4,765,000	4,447,000
U.K., exports ..	3,269,000	3,521,000	4,965,000	2,886,000	2,700,000
Holland, imports	11,657,000	12,579,000	11,166,000	13,455,000	14,644,000
Holland, exports	11,891,000	12,338,000	11,278,000	12,385,000	12,653,000
Germany, imports	7,905,000	8,658,000	8,019,000	9,341,000	8,762,000
France, imports	2,304,000	2,522,000	2,618,000	2,712,000	2,816,000
Italy, imports ..	340,000	202,000	124,000	128,000	168,000
U.S.A., imports	3,512,000	3,480,000	4,438,000	4,481,000	3,510,000

The French and Italian imports for 1902 represent eleven months only. The figures regarding South American (chiefly Calisaya) and African barks are stated in bales, and are therefore excluded. The chief point about the above figures is that, as already stated, the world's supply of bark is steadily increasing, the estimated output of Java, British India, and Ceylon being 17,153,000 English lbs. in 1902 against 16,542,000 in 1901. Taking the German imports of cinchona, it is interesting to compare with it the following exports of quinine from Germany—viz., in 1898, 7,094,000 oz.; in 1899, 7,447,000 oz.; in 1900, 6,523,000 oz.; in 1901, 6,899,000 oz.; and in 1902, 8,201,000 oz. Our imports from Germany show a continual shrinkage since 1898, the figures last year being 996,000 oz.; while those to the United States totalled 2,006,000 oz., against 1,921,000 oz. in 1901. The exports of quinine from France are remarkable, being officially declared at 2,490,000 oz. during 1902, against 1,222,000 oz. in 1901. This would show that French makers had more than their usual share of the demand last year. Italy exported 66,000 oz., or 6,000 oz. less than in 1901; while the exports from Java fell to 700,000 oz., against 1,033,000 in the previous year. The United Kingdom exported 1,142,000 oz. last year; and as these figures are declared for the first time no comparison can be made. Our imports last year were 1,443,000 oz. for the eleven months, of which Germany sent practically 1,000,000 oz.

DOUA is the name given to a new anthelmintic recently introduced into Europe from Arabia, where it is said to be in great demand. Examination shows it to consist of 95 per cent. santonin.—*National Druggist*.

The Poisons Report, Part II., containing the evidence, costs 1s. 6d.

The Poisons Committee's Report.

SUBMITTED TO PARLIAMENT ON TUESDAY; FEBRUARY 17, 1903.

THE COMMITTEE FINDS

That poisons are more used in Agriculture and Horticulture than in 1868; that the prosecution of unregistered sellers of poisons is uncertain and irregular, and too onerous an obligation upon the Pharmaceutical Society; that farmers and gardeners suffer inconvenience through the present restriction of the sale of poisons; and that the conveyance of arsenic is lax.

RECOMMENDS TO ADD TO THE POISONS SCHEDULE

PART I.

Cocaine and its salts
Preparations containing 1 per cent. or more of morphine
Picrotoxin
Vermin-killers containing poisons in Part I.

PART II.

Acetanilide and its preparations
Preparations of cocaine
Digitalis and its preparations
Preparations of morphine containing less than 1 per cent.
Soluble salts of oxalic acid
Mercuric iodide
Mercuric sulphocyanide
Strophanthus and its preparations
Sulphonal

Further, that a third part should be added to the Schedule permitting the sale by others than chemists and druggists of preparations of arsenic and tobacco for agriculture and horticulture, and of preparations of carbolic acid for agriculture, horticulture, and sanitation.

MR. ALEXANDER CROSS, IN A SUPPLEMENTARY REPORT,

Suggests free-trade in poisons for technical purposes, and that doctors' shops should be exempt from the Pharmacy Act.

MR. WALTER HILLS, IN A MINORITY REPORT,

Claims that the evidence does not justify the Committee's recommendations, except as to the additions to Parts I. and II. of the Schedule, and dissents from the recommendation as to Part III.

The report bears the following title:—

COMMITTEE ON POISONS.

REPORT,

SUPPLEMENTARY REPORT AND MINORITY REPORT.

OF THE

DEPARTMENTAL COMMITTEE

APPOINTED BY THE

LORD PRESIDENT OF THE COUNCIL

TO CONSIDER

SCHEDULE A. TO THE PHARMACY ACT, 1868.

TO REPORT THE ALTERATIONS THEREIN WHICH THEY
DEEM EXPEDIENT, AND WHETHER A

THIRD PART SHOULD BE ADDED THERETO;

WITH

COPY OF THE MINUTES APPOINTING THE COMMITTEE

AND A

LIST OF WITNESSES EXAMINED.

PART I.

Presented to both Houses of Parliament by Command of His Majesty.



LONDON:

PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE,
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1903.

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Then comes the minute appointing the Committee in these terms:—

A Committee, consisting of Sir Herbert Maxwell, Bart., M.P. (Chairman), Alexander Cross, Esq., M.P., Professor T. E. Thorpe, C.B., F.R.S., Professor W. A. Tilden, F.R.S., Thomas Stevenson, Esq., M.D., William Martindale, Esq., F.C.S., and J. H. Harrison, Esq., is hereby appointed to consider the First Schedule annexed to the Pharmacy Act, 1868, and to report the alterations therein which they deem expedient.

The Committee are at the same time desired to consider whether a third subdivision might not properly be added to the Schedule containing substances which, whether sold by pharmaceutical chemists or not, should be labelled or otherwise distinguished, and, if so, to enumerate the substances which, in their opinion, should be so treated.

8 June, 1901.

(Signed) DEVONSHIRE,
Lord President of the Council.

On the decease of Mr. William Martindale, which occurred on the 2nd February, 1902, the following Supplementary Minute was issued by the Clerk of the Council:—

The Lord President of the Council was this day pleased to appoint Walter Hills, Esq., to be a member of the Committee to consider Schedule A annexed to the Pharmacy Act, 1868, in the place of William Martindale, Esq., F.C.S., deceased.

(Signed) A. W. FITZROY,
12 February, 1902. Clerk of the Council.

Next is given a list of the twenty-six witnesses, who were examined in the order stated:—

SUTHERLAND, J. W., a pharmaceutical chemist, Glasgow (proprietor of business known as "Frazer & Green").

NEWSHOLME, G. T. W., F.C.S., President of the Pharmaceutical Society of Great Britain, and a pharmaceutical chemist, Sheffield.

CROSS, W. G., a pharmaceutical chemist, Shrewsbury.

ALLEN, C. B., Vice-President of the Pharmaceutical Society of Great Britain, and a pharmaceutical chemist, Kilburn, N.W.

CRAWFORD, R., Head of the Intelligence Department of the Board of Agriculture.

WHIFFEN, W. G., F.I.C., a member of two firms of manufacturing chemists (Thomas Whiffen, Battersea, S.W., and George Atkinson & Co., St. Andrew's Hill, E.C., and Southall, Middlesex).

CARTEIGHE, M., F.I.C., F.C.S., a member of the firm of Dinneford & Co., pharmaceutical chemists, New Bond Street, W., member of the Council of the Pharmaceutical Society of Great Britain, and Past-President of the Society.

CONNELL, L., S.S.C., Secretary to the Scottish Chamber of Agriculture.

WESTCOTT, W. W., M.B., Coroner for North-East London.

D

LYTLE, J., managing director of the Boundary Chemical Company (Limited), Liverpool.

PETTER, T. V., F.R.C.V.S., a member of the firm of Stephen Pcttifer & Sons, Malmesbury, manufacturing agricultural chemists, and inspector and veterinary inspector of the Board of Agriculture.

MAJOR, J. L., director of Major & Co. (Limited), Hull and Wolverhampton, manufacturers of "Eueryl" disinfectants, &c., and a member of the Tar-distillers' Association.

COCKBURN, J., chemist and druggist, and managing director of Francis Spite & Co. (Limited), Glasgow.

DARLINGTON, W., member of the Council of the Worcestershire and Herefordshire Agricultural Society, and steward in charge of the sheep-dipping tank of the Madresfield Agricultural Society.

SMITH, R. H., General Secretary of the Ironmongers' Federated Association.

BREMIDGE, R., Secretary and Registrar of the Pharmaceutical Society of Great Britain.

HILL, J. R., Assistant-Secretary in Scotland of the Pharmaceutical Society of Great Britain.

MUR, W. L., L.R.C.P., &c., a medical practitioner, of Dennistoun, Glasgow.

BECK, C., a member of the firm of R. & J. Beck (Limited), manufacturers of optical, mathematical, and physical instruments.

FOSTER, R. LE N., manager of the firm of F. C. Calvert & Co., manufacturers of carbolic acid, &c.

SELBY, R. B., M.D., a medical practitioner, of Portwilliam, Wigtownshire.

CANNELL, H., F.R.Hort.S., a nurseryman, of Swanley, Kent.

BOWEN-JONES, J., Chairman of the Chemical Committee, and a member of the Botanical and Zoological Committee of the Council of the Royal Agricultural Society of England.

VOLCKER, J. A., M.A., F.I.C., Ph.D., consulting chemist to the same Society.

LEGGETT, W. J., Hon. Secretary of the Patent-medicine Vendors' Defence Association.

LOBB, A. W., manager of the Patent-medicine Department of the Co-operative Wholesale Society of England and Wales.

Then follow the reports, as here printed:—

REPORT.

To the Lord President of the Council.

My Lord Duke,

1. The Committee appointed by your Grace "to consider the First Schedule annexed to the Pharmacy Act, 1868, and to report the alterations therein which they deem expedient; and also to consider whether a third subdivision might not properly be added to the Schedule, containing substances which, whether sold by Pharmaceutical Chemists or not, should be labelled or otherwise distinguished, and, if so, to enumerate the substances which, in their opinion, should be so treated," beg to report that they have sat on ten days for the purpose of hearing evidence, and that they have examined twenty-six witnesses; namely:—

Pharmaceutical Chemists (including the President, the Secretary and Registrar, and the Assistant Secretary in Scotland, of the Pharmaceutical Society of Great Britain)	8
Manufacturing Chemists	5
Consulting Chemist	1
Representatives of Agriculture and Horticulture	5
Doctors of Medicine	2
Patent Medicine Vendors	2
Coroner	1
Ironmongers' representative	1
Dealer in Photographic Materials	1

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2. Your Committee found it impossible to consider and recommend a re-arrangement of the Poisons Schedule without taking into account, first, the effect of the restrictive Sections of the Pharmacy Act, 1868, upon certain trades and industries, and, second, the changes which have taken place, especially in agriculture and horticulture, since the passage of the said Act.

3. Your Committee had their attention forcibly drawn to the great increase in the use of poisons in agriculture and horticulture since the passing of the Pharmacy Act, 1868. Sheep-dips, usually containing strong poisons, have come into universal use, and must be considered indispensable to the modern sheep-farmer. Five-and-thirty years ago the

killing of weeds, of parasitical insects and of fungoid growths upon growing crops by means of poisonous substances was rarely, if ever, practised, but such poisonous substances are now to be reckoned among the regular auxiliaries of agriculture and horticulture.

4. It was not possible for those responsible for the Pharmacy Act, 1868, to foresee the degree in which these industries should come to depend upon the use of poisonous materials; nor is it credible that, had they done so, they would have enacted anything calculated either to interfere with farmers and gardeners obtaining them conveniently, or to enhance their price by creating anything in the nature of a monopoly.

5. Your Committee, therefore, feeling convinced that the industries of agriculture and horticulture cannot be conducted effectively on modern principles without the extensive use of poisonous materials, felt it incumbent upon them, before proceeding to suggest re-arrangement of the Poisons Schedule, to ascertain whether either or both of the above-mentioned undesirable conditions had been caused by the provisions of the Pharmacy Act, and if so, whether relaxation could be conceded without undue risk to human life.

Prosecution of Unregistered Sellers of Poison.

6. Under the law as it stands, certain poisons and poisonous compounds (other than liquid carbolic acid for sheep-wash or other agricultural or horticultural purpose) cannot be legally retailed except by a registered chemist and druggist, and the Pharmaceutical Society is charged, under the 15th section of the Act, with the duty of proceeding against unauthorised vendors.

7. The administration of this Section has been characterised by considerable uncertainty and irregularity, arising, your Committee believes, out of the inadequate means at the disposal of the Society, which has no staff of inspectors nor other regular machinery for detecting the sale of poisons by unregistered persons.

8. There is this further objection to the administration of the Society's powers that they can only be exercised upon voluntary information and by extemporised means, which renders the working of the restrictive provisions the reverse of uniform. For instance, in the West-Midland district of England, the sale by unregistered persons of poisons used in agriculture and horticulture has been completely stopped in consequence of successful prosecutions by the Pharmaceutical Society. In part of Kent it has been stopped temporarily; whereas in many parts of Scotland and the North of England it is conducted by such persons with impunity. It follows from this that the effect of the 749 prosecutions undertaken during the six years 1896-1901 by the Pharmaceutical Society, and of the numerous cases in which penalties were exacted without prosecution, has been very unequally felt; for, while the law has been enforced in some districts, it has been wholly inoperative in others.

9. Your Committee are of opinion that the obligation laid upon the Pharmaceutical Society by the 15th Section of the Act is unduly onerous, seeing that even the limited extent to which they have taken action under it has involved them in a net loss of 700*l.* a year beyond the sums received as penalties, which are due to be dealt with as the Treasury may direct, but which the Society has been allowed to retain.

Inconvenience to Farmers and Gardeners.

10. Inconvenience has been experienced by farmers and gardeners owing to the restriction of the sale of poisonous material to registered chemists and druggists in such districts where there is no such qualified tradesman within easy reach. Your Committee are convinced that the inconvenience would have amounted to a very serious interference with legitimate industry had the provisions of the 15th Section been universally put in effect. For example, in the Highlands and Islands of Scotland, where sheep-farming is the principal business of agriculture, farmers are sometimes upwards of fifty miles distant from the nearest registered chemist and druggist, and the sale of sheep-dips is regularly carried on by ironmongers and other traders in contravention of the Statute.

11. A nurseryman and florist in Kent gave evidence as to the extreme inconvenience caused to cultivators when, owing to the successful prosecution of a firm of seedsmen, the

sale of weed-killers and insecticides was discontinued by nurserymen. He alleged that in horticulture there are numerous small cultivators and amateurs who would use these materials if they could get them, to the advantage of their greenhouses and gardens, but that chemists and druggists do not know what to recommend, whereas the nurserymen have knowledge of the proper remedies and ought to be in a position to supply them.

Conveyance of Arsenic and Arsenical Compounds.

12. In the course of their inquiry the Committee had their attention drawn to the manner in which arsenic, intended for industrial purposes, is conveyed. Mr. Lytle, a manufacturing chemist, making sheep-dips and weed-killers, stated that he received arsenic by rail or by ship, and he added: "We often receive the casks of arsenic with the contents running out on to the cart." He stated that a small lot, say a four-ton lot, would come by train, and that arsenic not only might be, but was, distributed about the goods station. He stated that although the railway companies have regulations as to the handling of dangerous things they are not acted upon, and cited the Crieff case as evidence of the fact.

Asked if the barrels coming to him were marked "Poison," he answered: "Some of them, not all; sometimes they are marked 'Arsenic' with a small stencil; in other cases they have the word 'Poison.'" But he added: "It is the exception they are so marked; in fact, the only time that I recollect their being marked 'Poison' is when we have bought foreign arsenic." Mr. Lytle stated that foreign arsenic was packed in casks enclosed in a second cask, which, in his opinion, tended to make the carriage "absolutely safe," but that such is never done in the case of English goods. The witness stated that instances had been brought to his knowledge where unfortunate results had followed from the careless way in which arsenic is handled in the wholesale way. There was, he stated, a very general evasion by traders of the 17th Section of the Pharmacy Act. Arsenical residue from oil-of-vitriol works—sulphide of arsenic, for example—was sent away to be treated, and any packages were thought good enough to hold it.

Your Committee are of opinion that the conveyance of arsenic and substances containing large quantities of arsenic under such lax observance of precaution is a source of danger to the public.

Recommendations.

13. Your Committee consider that it would be going beyond their reference to suggest changes in the administration of the 15th Section of the Pharmacy Act. They are of opinion, however, that preparations for use in connection with agriculture, horticulture, or sanitation might be placed in a third part of the Schedule, to be sold only by licensed persons and subject to regulations to be made by the Privy Council.

Your Committee further recommend that the traffic in arsenic should be regulated either by an amendment of the Arsenic Act, 1851, or by more stringent enforcement of the provisions of the 17th Section of the Pharmacy Act, 1868.

14. Your Committee beg to submit the following suggested alterations in Schedule A:—

PART I.

Arsenic and its preparations, except any preparation prepared exclusively for use in connection with agriculture or horticulture, and contained in a closed vessel or receptacle, distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the agricultural or horticultural purpose for which the preparation has been made.

Alkaloids.—All poisonous vegetable alkaloids and their salts, and all poisonous derivatives of vegetable alkaloids, except preparations of tobacco, or the alkaloids of tobacco, prepared exclusively for use in connection with agriculture or horticulture, and contained in a closed vessel or receptacle, distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the agricultural or horticultural purpose for which the preparation has been made.

Aconite and its preparations.

Atropine and its preparations.

Cantharides.

Cocaine and its salts.

Corrosive Sublimate.

Cyanide of Potassium and all metallic cyanides and their preparations.

Emetic Tartar.

Ergot of Rye and its preparations.

Morphine and its salts and preparations containing one or more per cent. of morphine.

Picrotoxin.

Prussic Acid and its preparations.

Savin and its oil.

Strychnine and its preparations.

Vermin Killers, containing poisons included in Part I.

PART II.

Acetanilide (Antifebrin) and its preparations.

Almonds, essential oil of (unless deprived of prussic acid).

Belladonna and its preparations.

Cantharides, tincture and all vesicating liquid preparations of.

Carbolic Acid and liquid preparations of carbolic acid and its homologues containing more than three per cent. of those substances, except any preparation prepared for use as sheep-wash, or for any other purpose in connection with agriculture, horticulture, or sanitation, and contained in a closed vessel, distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the special purposes for which the preparations are intended.

Chloral Hydrate and its preparations.

Chloroform.

Cocaine, preparations of.

Corrosive Sublimate, preparations of.

Digitalis and its preparations.

Morphine, preparations of, containing less than one per cent.

Nux Vomica and its preparations.

Opium and all preparations of opium and poppies.

Oxalic Acid and its soluble salts.

Precipitate, red.

Precipitate, white.

Mercuric Iodide.

Mercuric Sulphocyanide.

Strophanthus and its preparations.

Sulphonal.

PART III.

Preparations containing arsenic exclusively for use in connection with agriculture or horticulture, and contained in a closed vessel or receptacle distinctly labelled with the word "Poison," the name and address of the seller and a notice of the agricultural or horticultural purpose for which the preparation has been made.

Preparations of tobacco or the alkaloids of tobacco exclusively for use in connection with agriculture or horticulture and contained in a closed vessel or receptacle distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the agricultural or horticultural purpose for which the preparation has been made.

Preparations of carbolic acid or its homologues for use as sheep-wash, or for any other purpose in connection with agriculture, horticulture, or sanitation, and contained in a closed vessel distinctly labelled with the word "Poison," the name and address of the seller, and a notice of the special purposes for which the preparations are intended.

15. Your Committee beg to record their sense of the excellent service rendered during the course of this inquiry by the Secretary, Mr. E. B. Masham.

We have the honour to be,

Your Grace's most obedient Servants,

HERBERT MAXWELL, Chairman.

ALEXANDER CROSS.

T. E. THORPE.

WILLIAM A. TILDEN.

THOS. STEVENSON.

J. H. HARRISON.

25th November 1902.

SUPPLEMENTARY REPORT.

RELAXATION OF RESTRICTIONS OF SALE FOR TRADE AND TECHNICAL PURPOSES.

To the Lord President of the Council.

My Lord Duke,

Whilst fully agreeing with the General Report, which I have signed along with my colleagues, so far as it goes, I am of opinion that the public interests would be promoted, and no harm would ensue, if greater latitude were given in the sale of such of the articles the Committee have been inquiring into as are employed for manufacturing uses. The importance of these substances has been established for the purposes of agriculture and horticulture. It seems to me their importance is equally great for trade and technical purposes. If so, it is just as necessary to release

their sale for these latter purposes from the restrictions of an Act intended to regulate the dispensing of poisons as drugs by pharmacists. Pharmacy and the Pharmaceutical Society have really no connection with such matters at all.

The use of these substances (poisonous) for trade and technical purposes is developing continually—it is certain to increase every year; and in these times when all trades are so actively beset by competition from abroad, no restrictions should be perpetuated which are not absolutely called for.

As regards the public safety, the evidence presented has made it clear that the present enactments do not afford protection, depending as they do upon the restriction of sale to one set of persons (pharmaceutical chemists), and to them alone. The actual risk occurs after the sale is effected and when the article is in the hands of the consumer. And this is practically the same whether the seller be a chemist or whether he be an ordinary trader.

To describe the sale of these articles for trade purposes as "wholesale" transactions, and therefore outside the scope of the Pharmacy Act, seems to me in fact incorrect, and at best a subterfuge. They are often required in small quantities, bought in open shop, and pharmaceutical chemists have some show of title under the Pharmacy Act to claim a monopoly of the trade, with resulting high scale of profit and enhanced cost to consumers.

As it is manifestly impossible to foresee the developments of trade or draw up now an exhaustive or permanent list of articles proper to be placed in the proposed Part III. to Schedule A, I am of opinion that powers should be conferred on some public authority to deal with the list of articles embraced under this new Part III., from time to time as necessity may require, and to control and prescribe the regulations—various as these must be, probably different in the case of each article—under which the sales shall be carried on of such substances as it may seem necessary so to deal with. A strong case has been made out for the removal of all such matters from the control of the Pharmaceutical Society, which is a private association, existing for purposes quite apart from the public interest. In my opinion such control as the sale of such substances demands should be elastic, automatically adapting itself to the conditions of manufacture and trade as such arise. And as the Privy Council are in possession of the best information and have the necessary well-qualified staff, and have been long associated with this subject, I recommend that an Act of Parliament should be obtained to place full powers of regulating and controlling sales of such poisonous substances as may be required in trades and manufactures in their hands and so settle the matter on a permanent basis, avoiding recurring recourse to Parliament, otherwise necessary as new circumstances arise.

I suggest one other point which I think might be dealt with in any Act of Parliament which may follow this report—namely, that country medical practitioners and their assistants should be exempt from the operations of the Pharmacy Act. It has been brought out in evidence—

(1.) That the doctor's surgery in many districts is the only place where drugs can be obtained, some of which are poisons.

(2.) That the doctor could not always be in attendance, and could not afford to keep a fully qualified man to be always on his premises.

(3.) That occasions frequently arise in which the doctor's assistant is compelled, during the doctor's absence, to dispense prescriptions containing articles which are called poisons; that this is a general practice, unavoidable in the circumstances, and for the public convenience.

It therefore appears to me that power should be given to local authorities to grant licences to suitable persons to assist medical men in dispensing prescriptions when it becomes necessary to do so in the absence of the medical man, whether such persons have passed the Pharmaceutical Society's examinations or not.

I have the honour to remain,

Your Grace's most obedient servant,

December 10, 1902. ALEXANDER CROSS.

MINORITY REPORT.

To the Lord President of the Council.

My Lord Duke,

I.—My appointment as a member of your Committee occurring late in the inquiry, I did not have the opportunity

of hearing the views expressed by witnesses in the earlier stages, but I have been furnished with the Minutes of evidence, and have carefully considered, as a whole, the opinions put before the Committee.

My review of the evidence, associated perhaps with the special knowledge I happen to possess respecting the administration of the Pharmacy Act, 1868, compels me to dissent from the conclusions arrived at by the majority of your Committee and expressed in the Report. Neither the conclusions nor the recommendations made in the Report appear, from my point of view, to be reasonably deducible from the evidence taken during the inquiry.

I accepted a seat on the Committee at the invitation of your Grace, and brought an open mind to the consideration of the matters referred to us. My opinion is therefore based solely upon my interpretation of the evidence, and is an independent and purely personal one.

II.—From a comprehensive survey of the testimony submitted by the twenty-six witnesses examined, the chief impression conveyed is that a strong agitation against the salutary principle underlying the Pharmacy Act—namely, the competent technical training of the vendor—has been organised on behalf of manufacturers, proprietors, and agents of specifics containing poison; and that the demand for relaxation of the statutory restrictions emanates, not from agriculturists or from horticulturists, but from those persons whose natural desire it is to promote the sale of their own particular preparations.

Only two witnesses who may properly be described as users of poisonous compounds furnished evidence, but neither of them stated that he had any practical difficulty in procuring what was necessary for his own requirements, though one of them desired to have the liberty of selling poisonous compounds without formality of any kind.

The point is strikingly exemplified by the remark of a witness, who stated as a reason for objecting to the Pharmacy Act that he could not readily introduce poisonous novelties through chemists and druggists. That objection is distinctly a manufacturer's objection, and is the predominant note throughout the inquiry. But I apprehend that some regard must be had to the public side of the question, and in my opinion it is an important advantage that chemists and druggists do act as a restraint upon the development of the retail business in poisonous novelties, and do to that extent carry out the object which the Legislature had in view in passing the Act.

III.—A more detailed examination of the body of evidence leads me to form the following conclusions:—

(a.) That the administration of the Pharmacy Act by the Pharmaceutical Society of Great Britain does not interfere, and has not interfered, with the legitimate use of poisons for technical or manufacturing purposes, and does not prejudice or harass either agriculture or horticulture.

(b.) That no real ground is shown for the relaxation of the restrictions imposed on behalf of the public by the Pharmacy Act, 1868, and that no departure from the sound principle of that Act is warranted.

(c.) That urgent necessity exists—though the point may not be deemed strictly within the terms of reference—for the efficient registration and supervision of every open shop in which poison is sold by retail.

(d.) That it is expedient that the "putting-up," packing, storing, and conveyance of poisons and poisonous compounds should be subject to regulation.

IV.—(a.) I refer to the evidence tendered by the Pharmaceutical Society, and more particularly to that given by Mr. Carteghe, a past President of the Society. His remarks appear to merit quotation:—

The restrictions of this Act do not apply in restraint of any form of trade, agricultural or otherwise. The Act was passed to prevent the distribution to the public in an open shop of small quantities of poison. We have never sought to interfere with the use of a poison, whether it was placed in Part I. or Part II., for the purpose of manufacture; but when a poison is put into a popular form, and put into an open shop, and the public are invited to buy it, we conceive (and I think rightly), whatever the demands of agriculture may be, that it is a danger to the public.

That the administration of the Pharmacy Act has proceeded on these lines is supported by nearly all the witnesses who gave evidence. On behalf of the Boundary Chemical Company (Limited) it was admitted that their legitimate business had not been interfered with. The same admissions

are made by other technical or manufacturing witnesses, and it is difficult to extract from anything they said a genuine charge against the Pharmacy Act. A number of complaints against the Pharmaceutical Society have been made, and I am bound to add that many of them were characterised by a considerable disregard for fact, and want of knowledge, but as those charges were wholly disproved by the Registrar and by the Assistant Secretary in Scotland, they may properly be ignored.

V.—(b.) The evidence is not convincing that under the present conditions any serious practical inconvenience has been experienced by the *bonâ-fide* user in obtaining supplies of poisonous compounds for the needs of agriculture and horticulture. I fail to find that it supports the view that there is any hardship imposed by the Pharmacy Act. Nor do I find any justification for assuming that the general tendency of the operation of the Act is to enhance the price of agricultural preparations. Carbolic acid is no dearer, and its sale is no less, as the result of being supplied through qualified channels. Furthermore, it is difficult to imagine what real advantage could accrue to agriculture, or to agricultural users, if unqualified vendors were permitted to reap whatever pecuniary benefit there may be in the sale of poisons, rather than the persons already existing and specially created by statute for that purpose. At any rate, I cannot, as a member of the public, acquiesce in a special readjustment and relaxation of the law for the mere object of transferring alleged profits from the pockets of one licensed class to another licensed class.

Relaxation of the restrictive provisions of the Act in the manner suggested by Mr. Bowen Jones, representing the Royal Agricultural Society of England, is a departure from the principle that safety to the public lies in the training of the vendor. Only the most exceptional causes, based upon public necessity, could justify such a backward step, and, in my judgment, the evidence does not reveal the existence of rational cause or urgent circumstance for even partial abandonment of such a well-proven statutory principle. I am of opinion that a third schedule to the Pharmacy Act, as suggested in the Report of your Committee, is unnecessary, would be impolitic, and would be unworkable in practice.

Attention may be directed to the statement of witnesses that the number of persons in Great Britain who are registered as being legally entitled to retail poisons is sufficiently large to ensure the adequate supply of all reasonable public requirements in regard to articles coming within the Schedule; and I cannot ignore the opinion of the Coroners' Society, expressed by its representative before your Committee, that the restrictions affecting the retail sale of poisons and poisonous substances should be increased rather than diminished.

VI.—(c.) I am satisfied that the Pharmacy Act would be a much more efficient safeguard than it is at present against the careless selling of poisons and the incompetent dispensing of medicines if the Registrar appointed under the Act were strengthened with powers to institute inquiries in any shop where the public were led to believe Pharmacy is being practised. It is reasonable to admit that every citizen has a right to expect that any shop in which a prescription is made up or a poison sold, shall be under the immediate and personal control of a qualified man. This seems only attainable by a system of registration of shops, and a draft Bill containing provisions for establishing and maintaining such a system has been drawn up by the Pharmaceutical Society

of Great Britain, and is now, I understand, in the hands of the Lords of the Council.

VII.—(d.) In regard to the expediency of regulating the packing, storing, and conveyance of poisons, whilst I may be travelling somewhat beyond the precise limits of reference, it appears to be undesirable to ignore the serious risks to the public shown by several witnesses to exist in the wholesale handling of poisonous substances. One witness mentioned that arsenic occasionally came to him in a leaking container, sometimes labelled "Poison," and sometimes without any indication of its poisonous nature; that it is conveyed in ships or by trains regardless of the use to which the vehicle may subsequently be put. I am gratified to find that my colleagues on the Committee are in accord with my conclusions in this connection, but I feel it would be inappropriate to discuss in this Report the wider question as to the nature of the regulations which appear to be necessary.

VIII. I concur in the suggestions of your Committee in regard to the addition to Schedule A of the Pharmacy Act of:—

PART I.

Atropine and its preparations.

Cocaine and its salts.

Morphine and its salts, and preparations containing one per cent. or more than one per cent. of morphine.

Picrotoxin.

PART II.

Acetanilide.

Cocaine, preparations of.

Digitalis and its preparations.

Mercuric iodide.

Mercuric sulphocyanide.

Morphine, preparations of, containing less than one per cent. of morphine.

Oxalic acid and its soluble salts.

Strophanthus and its preparations.

Sulphonal.

Most of the foregoing articles have been the subject of representation to your Grace by the Council of the Pharmaceutical Society, and could have been added to the schedule naturally as the result of the ordinary operation of Section II. of the Pharmacy Act—the statutory machinery provided for that purpose.

I dissent entirely from the other suggested alterations to the schedule for the reasons indicated in Paragraph (b) of this Report.

IX.—I recognise and have indicated in what direction I think the law relating to the retailing of poison requires strengthening, and I respectfully submit to your Grace the suggestion that it might be found helpful towards attaining a practical basis for amending legislation if the Pharmaceutical Council, as the administrators of the Pharmacy Act for thirty-four years, were invited to confer with the representatives of the Lords of the Council and of the Board of Agriculture.

X.—I desire to be associated with the other members of your Committee in cordial recognition of the unvarying courtesy and assistance received from Mr. Masham, who has acted as Secretary to your Committee throughout the inquiry.

I have the honour to be,

My Lord Duke,

Your Grace's most obedient servant.

WALTER HILLS.

16th December 1902.

The Evidence in Brief.

FIRST DAY.

ALL the members of the Committee were present on Tuesday, November 19, 1901.

Mr. J. W. Sutherland was called and examined by the Chairman. While in business at Dumfries he handled sheep-dips, weed-killers, and preparations of that kind. He had no general statement to submit, because the notice to him stated that he was to be asked "to give evidence as to the sale of poisons in Scotland for agricultural purposes, and as to the sale of mineral acids and the like in that part of the Kingdom." He considered that the sale of poisons, including

sheep-dips, is in Scotland confined to registered chemists. There may be villages in which there is no chemist, but not many. Shopkeepers had stopped the sale of weed-killer after the Crieff poisoning case, following from sugar being damaged by weed-killer in transit.

Professor Tilden examined witness as to the nature of weed-killer and its manufacture, the professor confessing that he was not quite sure of the Pharmacy Act extending to Scotland. Mr. Martindale then elicited that some arsenical preparations are sold in powder form, and he was followed by Dr. Stevenson, who asked if there is great

danger in these poisons being handled by the non-chemist, and witness impressed upon the Committee that the chemist knows he is handling dangerous compounds, and other retailers—*e.g.*, ironmongers—do not. Professor Tilden, having ascertained that the articles are labelled "Poison," said he did not see what difference it can make after the material leaves the hands of the manufacturer, and witness explained to him the precautions taken by chemists. He was then taken by the Chairman as to what are wholesale and retail transactions, asking if a purchase of 1 cwt. of dip by a farmer is wholesale; but the Committee got little further until Professor Tilden suggested that "wholesale" means the supply from the merchant or manufacturer to somebody who sells, with which witness agreed. Dr. Stevenson was not satisfied, and questioned witness as to whether sales to him were wholesale or retail, but witness could give no definite answer. Mr. Martindale tried to clear up things by instancing the case of supplying doctors; but Professor Thorpe was not satisfied, and wanted to know whether sales of 2 or 3 oz. to the Government laboratories are wholesale or retail transactions: he bought from a person not a registered chemist. Witness was not sure that he could answer. Mr. Cross then took him in hand, questioning him as to his statement that shopkeepers in Scotland had given up the sale of poisons consequent on the Crieff case; next questioned him narrowly as to the sale of sheep-dip and the difficulties of farmers getting it from chemists at reasonable prices, and the profits on the articles. Witness insisted that chemists do not charge exorbitant prices. After brief interventions by Professor Thorpe and Mr. Martindale, Mr. Cross took witness on the scheduling of such articles as sulphate of copper and butyr of antimony, Mr. Sutherland admitting that there is a difference between articles prescribed and dispensed and those put up by manufacturers and labelled "Poison." He was then asked by Mr. Cross about the Pharmaceutical Society's prosecutions, and the membership of the Society; then Mr. Martindale re-examined him, as it were, with the object of bringing out the precautions that are taken by chemists in selling poisons, the training that they undergo, and the safety to the public that is ensured by poisons being handled by qualified persons. Professor Thorpe, Dr. Stevenson, Mr. Harrison, Mr. Cross, and Professor Tilden further questioned witness, the examination having a tendency to show the spirit of the following statement by Professor Thorpe:—

I do not understand how all this education in this particular case, or what you claim as education, really puts you in a better position than a reasonably intelligent ironmonger's assistant.

SECOND DAY.

On Wednesday, November 20, Mr. G. T. W. Newsholme, F.C.S., President of the Pharmaceutical Society, was examined. At the lead of Mr. Martindale witness spoke of the supply of poisons for technical purposes to Sheffield manufacturers and the Technical College. He was questioned as to the alteration of the Poisons Schedule, and stated that the Pharmaceutical Council has no difficulty in administering the Act. He corrected Mr. Sutherland's figures as to the membership of the Society, and suggested as one reason why some people buy poisons from general shops that there they do not require to go through the legal formality that chemists insist on. He gave instances of the chemist's care. Then Professor Tilden took witness on the differences for distribution-purposes between kinds of poisons, Professor Thorpe interposing with a mention of Scheele's green; then Professor Tilden inquired as to deaths from poisoning, and Mr. Martindale handed in the Registrar-General's list, so as to show that deaths from coloured arsenic compounds are rare. Mr. Martindale then questioned witness as to the administration of the Pharmacy Act, which witness said the Pharmaceutical Society had done with a liberal view. He was next taken on photographic chemicals, Professors Tilden and Thorpe interposing questions as to pyrogallol acid (an unscheduled strong poison), potassium cyanide, and potassium bichromate. He did not agree with the suggestion of a third part to the schedule, and was questioned by several members on the point without giving way. Mr. Cross then took him on the sale of mineral acids, and the Pharmaceutical Society's methods of prosecuting, and in his replies Mr. Newsholme assured the Committee that the Council prosecutes impartially, whether the cul-

prits are chemists or not, members of the Pharmaceutical Society or not. Mr. Cross examined him as to the number and qualifications of his employes, the objects of the Society, wholesale and retail transactions and distribution of disinfectants by municipalities, as well as the sale of dip weed-killers and insecticides. Then Mr. Martindale questioned him as to the danger of nicotine insecticides and what the Society has done to regulate the sale; but he had not got far before Mr. Cross interposed again with the object of showing that the Pharmaceutical Society prosecutes in order to prevent the sale of certain articles except through chemists, to which witness replied that the Society solely acts because the duty has been imposed upon it. Dr. Stevenson gave a more profitable turn to the evidence by ascertaining facts in regard to the poison regulations, leading up to the need of a register of poisons if permitted to be sold by unqualified persons. The witness was asked to say what should be added to the poisons schedule, but was unprepared,* and Professor Thorpe and the Chairman commented on the fact. He was next questioned by Dr. Stevenson as to how the schedule is added to, and the sale of medicines containing small quantities of poisons, Professor Thorpe adding questions regarding proprietary medicines. In the course of his answers, Mr. Newsholme stated that Mr. Owbridge had removed morphine from his lung-tonic when the Society was to prosecute; it is said that Williams's pink pills contain arsenic, but witness's assistant found none. He knew from Alpe's book that there had been patents for medicines. He was further questioned in regard to preparations of arsenic, ergot of rye, and the like, and agreed with Mr. Martindale that the difficulty of detecting minute quantities of poisons made it difficult to carry out the Act.

Mr. W. G. Cross, of Shrewsbury, was the next witness, the greater part of his evidence (extending to 6½ pages) being elicited through questions by the Chairman, Mr. Cross, and Professor Tilden. The Chairman led off with questions as to sheep-dip and weed-killer. Speaking for himself, witness said he does a good business in these, and in all his experience he had never heard of the restrictions on their sale causing inconvenience to those who require them. Mr. Cross's questions to the witness were smartly replied to, one answer being, "I label my poisons as I send them out. I label them not only with paper, but with something more valuable than paper—with discretion." He told what he does with Cooper's dip, and dissented from the suggestion by Mr. Cross that this discretion is not necessary in the case of poisons put up in regulation packets by the makers. How does the three years' training and examination help matters? is the gist of questions put to him; and he replied:—

Because the chemist as he at present exists, and as I hope the Legislature will encourage him to exist, is a trained and educated, and, I hope, in the best sense of the word, a scientific man, a man upon whose discretion the public are enabled to draw at a small cost, if at any cost at all.

Then witness was taken on to greenhouse vaporants, Professor Tilden also joining in this part of the examination. He told the Professor that chemists generally adhere well to the requirements of the Act, and gave examples. He did not believe chemists refuse to show their poison-books to accredited officials, and assured Mr. Martindale that chemists do not charge higher prices for Cooper's dip, and the like, than other retailers—competition assures that. Mr. Martindale took witness thoroughly over the ground of the inquiry, especially bringing out the fact that Minor candidates are examined as to the sale of poisons. Towards the end of his evidence Professor Tilden referred to the analysis

* On December 5, 1901, the Secretary of the Society submitted the following list of articles which the Council suggested should be added to Schedule A:—

Part I.—Picrotoxin. All poisonous derivatives of vegetable alkaloids and their salts. Cocaine and morphine and their salts are already included in "All poisonous vegetable alkaloids and their salts" in Part I. of Schedule A of the Pharmacy Act, 1868; but it may be deemed desirable to specifically name them.

Part II.—Acetanilide (antifebrin); cocaine, preparations of; digitalis and its preparations; hydrochloric acid (strong); nitric acid (strong); sulphuric acid (strong); mercuric iodide; mercuric sulphocyanide; sulphonal; strophanthus and its preparations; vermin-killers containing free phosphorus.

of poisoning-cases put in by Mr. Martindale, and the following conversation took place:—

(Mr. A. Cross.) Is this paper to come before us as a document?

(Professor Tilden.) I do not know what position we are in with regard to this; it is one of the Registrar-General's reports.

(Mr. A. Cross.) It would be very interesting.

(Professor Tilden.) It contains a great deal of information, which would be interesting to the Committee. Then there is hydrochloric acid.

(Professor Thorpe.) I do not quite know what this document is which Professor Tilden is reading from.

(Professor Tilden.) It was placed on the table by Mr. Martindale. It contains a synopsis of the cases of poisoning in 1899 analysed in such a way as to show how many cases of poisoning by negligence and accidents, and how many cases of suicides, occur from all those different poisons starting from acetic acid at the top to "kind not stated" at the bottom.

(Professor Thorpe.) The origin of that document will not appear when we have the notes before us, and it seems to me somewhat irregularly brought in. Will Mr. Martindale hand it in?

(Mr. Martindale.) I will bring it up in my notes hereafter. I did not mean it to go forward now.

(Mr. A. Cross.) Whom is it published by?

(Professor Tilden.) This is extracted from THE CHEMIST AND DRUGGIST. It is a reprint.*

(Mr. A. Cross.) I think it would be very valuable to us.

(Professor Tilden.) It is in the annual report of the Registrar-General. It is therefore accessible to anybody. It is summarised from that.

(Professor Thorpe.) Show what it is and make it regular, and proceed to examine upon it.

Mr. C. B. Allen was the next witness. In answer to Dr. Stevenson he said the schedule should be extended by adding cocaine and other articles as specified by the Council (see footnote, page 326). He had also to answer questions regarding the sale of cocaine and morphine lozenges, and said he would register a sale of a 5-per-cent. solution of cocaine or require a doctor's prescription for it. Mr. Martindale told the Committee of the principle *de minimis non curat lex* having been decided as regards poisons, but the questions as to lozenges went on. Professor Thorpe playfully asking if the Pharmaceutical Society had been asked to deal with the arsenical-glucose business. Witness corroborated Mr. Newsholme as to the Council's administration of the Act and there being no vexatious prosecutions, and held that greater restriction than at present should be placed on the sale of poisonous nostrums, and was of opinion that all things sufficiently dangerous should be scheduled as poisons. When Mr. Cross took him on the sale of photographic chemicals and the hardship in not getting them where the camera is bought, Mr. Allen said,

I do not know how far I am at liberty to tell you gentlemen on this Committee, but of course, as you know, amateur photography is just now very popular, and it permeates all through the land; your son, a little chap of 10 or 11, has his camera, and your daughter, and so on. Is it right that children and irresponsible people should be able to get such things as cyanide of potassium and bichloride of mercury, and put them about your house as indiscriminately as they do bromide of potassium or pyrogallie acid, or anything else they use? They do not know the difference. And do you suppose that the photographic dealer is going to caution you very much about the particular poison he is handing over?

Mr. Cross then put witness through his gamut of questions as to the difference between the sale of poisons by chemists and non-chemists, and Professor Thorpe took him on retail and wholesale transactions, witness's replies practically amounting to this—that sales to a person in Professor Thorpe's position are regarded as wholesale transactions. Dr. Stevenson wanted to know how he would regard a sale of 1 gr. of aconitia, and Mr. Martindale's questions brought out the clear statement that extraordinary precautions would be taken before aconitia was parted with.

"I thank you for your evidence," said the Chairman.

THIRD DAY.

On Thursday, November 21, 1901, the third day of the inquiry, Professor Thorpe was not present. Mr. Harrison read a letter from Mr. Dobbs at the suggestion of Mr. Martindale. It told what Mr. Dobbs's Society exists for.

* The article is printed as an appendix to the report. It is an editorial article from the C. & D., April 20, 1901, on "Poisonings in 1899."

Mr. R. F. Crawford was called. He said that the whole subject of the Committee's inquiry came under the consideration of the Board of Agriculture in 1898 when the Poisonous Substances Bill was introduced. The Board feel, he said, that there certainly ought to be no monopoly as regards the right to sell such substances as sheep-dips and insecticides containing poisonous substances, and they would like to see as few restrictions as possible on the sale of those articles. He mentioned some of the bodies who have written to the Board on the subject and to that effect. He was directed by the Board of Agriculture to state that it appears to the Board that agriculturists are entitled to ask that the sale of such articles as fertilisers, sheep-dips, insecticides, and other chemical preparations used for agricultural or horticultural purposes should not be restricted to pharmacists, and that no statutory conditions should attach to their sale unless they contain poison in such a quantity as to render it practicable that human life may be destroyed through their instrumentality, in which case some such requirements as those set out in Clause 1 of the Bill* as circulated might fairly be enforced. Professor Tilden questioned the witness as to the substances recommended by the Board for agriculture and horticulture. Many of them are harmless, and generally, he said, the poisons used had not brought them instances of danger. Mr. Martindale examined him very thoroughly, in order to show that he (witness) imagined that many articles are scheduled as poisons which really are not, and he was also questioned as to the effect that scheduling mineral acids and certain other potent articles would have upon agriculture.

Mr. W. G. Whiffen, F.I.C., examined by the Chairman, told of the precautions that are taken in his firm's factory as regards strychnine, strophanthin, morphine, and similar poisonous alkaloids, with a view to minimising accident and preventing loss of life. Then he was examined in regard to the manufacture of nicotine, and he stated that when his firm brought out an insecticide containing that poison it was necessary to introduce it to the public through tradesmen familiar with the business—viz., horticulturists—as chemists and druggists had not the personal knowledge requisite or the business connection required to push it. The result of his experience was that he considered that some other means of distribution was necessary than that regulated by the Pharmacy Act. Mr. Cross also effectively examined witness as to the value of nicotine as an insecticide, witness declaring, in answer to questions, that he had really no prejudice against chemists and druggists in the matter; "they are," he said, "my very best friends and largest customers for other material," but not for these agricultural and horticultural requirements. He suggested that particular bottles should be used for poisons, and, in reply to Mr. Martindale, quoted cases reported in THE CHEMIST AND DRUGGIST, which showed that the present regulations are not adhered to.

Mr. Michael Carteighe, F.I.C., F.C.S., was the next pharmaceutical witness called. He said to the Chairman, "I had something to do with the passing of this Act, and I am just the connecting-link between that generation and this. I have taken a very considerable interest in the question of poison legislation, and in the administration of the Act, and by degrees, partly on its chemical and partly on its legal side, it has become as interesting to me as Bradshaw's Railway Guide. Without that interest one would not have taken quite so much pains." Then he was questioned about arsenic and carbolic acid in the form of Cooper's and MacDougall's sheep-dips, and when Mr. Cross put it to him that once a poison like these gets into the agricultural household it does not matter how one gets it, Mr. Carteighe promptly replied, "That is just the point—that is where we chemists and druggists come in. It is the chemist's business to restrict the sale of those poisons. This Act lays down the principle as far as possible to restrict the sale of poisons to the public." He also told the Committee this question had been threshed out before 1868 by a Select Committee before his own eyes, with the result that it was considered expedient to make the present restrictions. Further, he said—

The Society undertook rather against its will the responsibility of dealing with this very complicated subject of poisons. But it was pointed out that it was the duty of someone to undertake it;

* That is, the Poisonous Substances Bill of 1898.

that there was already a register existing of pharmaceutical chemists; that the chemist was the person to whom people went for chemicals, and that the druggist at the commencement of the last century was also the person who sold things used in agriculture, and they were naturally the persons to be entrusted with the duty. Now we are asked—after educating a large number of men and distributing them for the convenience of the public throughout the kingdom—we are asked whether it is any good their having any education at all.

Various members of the Committee, especially Professor Tilden, attacked the witness on other points, but they did not get much change out of him. Even he, however, was unable to tell the Committee what a wholesale transaction is.

FOURTH DAY.

The Committee did not meet again until Tuesday, December 17, 1901, when all the members were present. Mr. Isaac Connell, S.S.C., was the first witness, and he said the Scottish Chamber of Agriculture wants the restrictions on agricultural poisons removed. His evidence as to the sale of poisons in Scotland was startling. This was it, and practically the text of the rest:—

Broadly, the position is this: that the Pharmacy Act of 1868 in Scotland has really not been up to the present time enforced. Up to quite recently there has been really no attempt on the part of anybody to enforce it so far as regards sheep-dips, &c., with the result that the great bulk until quite recently—indeed, I believe, 90 per cent. of the sheep-dips and insecticides containing poisonous ingredients—were sold through ironmongers and manure and grain merchants. And therefore the evil has not been felt to the same extent in Scotland as it would have been felt, and will be felt, if the Act should be put into force.

He considered it notorious that chemists and druggists endeavour to prevent the sale of such things, and gave one or two instances. Mr. Martindale wanted further facts, and elicited that one manufacturer of sheep-dips has 200 chemist customers and 200 merchants. Many of the latter are ironmongers. Witness estimated the average expenditure by farmers on sheep-dips at 12s. to 15s. a year each, and considered that British farmers, compared with continental farmers, are at a disadvantage through difficulty in getting such poisons—a point on which Mr. Martindale corrected him.

Dr. Wynn Westcott, the next witness, gave a different colour to the proceedings, for, to start with, he said he was authorised by the Coroners' Society to say that the present restrictions on the sale of poisons should be increased rather than diminished. He wished some of the poisonous alkaloids to be specified in the poisons schedule, instancing atropine (already in), cocaine and its salts, nicotine and its preparations, and secondary alkaloids—*e.g.*, homatropine—as well as free phosphorus. Strophanthus and acetanilide he would also add, the latter, he said, being sold under the name of "Daisy powder." He gave a list of the deaths from poisons in N.E. London during the 6½ years preceding, and was questioned very freely as to his opinions respecting individual poisons and their danger. He suggested that the proviso of the Sale of Drink to Children Act might be borrowed as to the sale of poisons. The last words that witness said were, "I have never heard of a death from Winslow's syrup, and I have had five deaths from chlorodyne." [It should be noted that Dr. Westcott was the spokesman of the only Society in the Kingdom of persons who investigate poisoning fatalities.]

FIFTH DAY.

Mr. J. Lytle was the first witness on Wednesday, December 18, 1901. Professor Thorpe started his examination. He said agricultural agents, nurserymen, and seedsmen are better distributors of sheep-dips, weed-killers, and insecticides, because they are better able to recommend the right thing. Chemists refuse to stock agricultural chemicals in any quantity, and he gave an instance in which 40 gals. of a preparation of his own had been adulterated by a pharmaceutical chemist in Scotland to 120 gals. with common creosote and caustic soda. Mr. Martindale wanted to know how he proved that, and if he took any action. He did not. This digression over, Professor Thorpe continued his questions, and witness, replying to them, elaborated his first statement as to other tradesmen than chemists being the proper persons to sell the articles he makes. He instanced ironmongers as good agents, and Professor Thorpe could not understand why an ironmonger is necessarily the

best agent for distributing sheep-dip, to which witness replied that it is because ironmongers sell agricultural implements. Mr. Martindale then questioned the witness about the Arsenic and Pharmacy Acts, it transpiring that his firm had been warned by the Pharmaceutical Society about contravening the Pharmacy Act; but he explained that it is retailers of the firm's preparations who contravene the Act, not the firm. Nine-tenths of preparations are sold through ironmongers and seedsmen. He was not aware that in some districts chemists are the sole distributors of Cooper's dip unless where the makers send it, but he accounted for that by saying that Coopers were first in the field, and therefore had the opportunity of appointing chemists as their agents. He wanted a wholesale order defined, and Mr. Martindale remarked, "We have not had that, I am sorry to say." "My definition," replied the witness, "is not the quantity so much as whether it is sold to a user direct or sold to an intermediary."* Witness was asked by the Chairman how many chemists there are in Lockerbie, and he said four or five, but that farmers will not go to chemists when they can get what they want from seedsmen. Mr. Martindale then continued his examination of the witness in regard to the influence of the Pharmacy Act upon the selling of agricultural poisons, specific instances of infringement being put to him. Next Dr. Stevenson asked him the precautions taken by his firm in regard to the vessels in which they send out these commodities, and he explained the nature of the drums and caution-labels on them. If ordinary dealers were permitted to sell articles at present covered by the Acts, he would have the same regulations apply, except that a written order for the articles should be required instead of signing the book. Questioned as to prices, he said that grocers divide the commission with the agriculturists, chemists do not as a rule. He admitted to Mr. Martindale that he wanted his articles to be cheapened as much as possible. Mr. Martindale then produced a bottle of ant-decay containing 10 per cent. of arsenic put up in an ordinary medicine-bottle, which witness thought a dangerous way of distributing such a strong poison. After a few questions from Mr. Cross, Professor Tilden wanted to know if the circumstances under which ironmongers, seedsmen, and similar retailers carry on their business would enable them to accept and act upon any regulations that were imposed in the way of storing poisons separately in a cupboard, locked up or in a separate place, and if that would increase the difficulties of selling poisons and interfere with the sale? Witness was of opinion that all this could be met by these retailers. He was of opinion that the Pharmaceutical Society had done practically nothing to regulate the sale of poisons. The trade in agricultural poisons has grown up since the Pharmacy Act, and owing to chemists not meeting manufacturers in supplying the demand, manufacturers had been compelled to do the business direct or through unqualified agents.

Mr. T. V. Pettifer, the next witness, was examined by the Chairman in regard to the sale of sheep-dips and similar preparations, and described, in reply to questions by Professor Tilden, Dr. Stevenson, and Mr. Martindale, the manner in which his firm put up their poisonous preparations. He mentioned that corrosive sublimate is purchased by shepherds from chemists as "stone mercury" for treating sheep, and he considered that chemists and druggists act as ordinary tradesmen in distributing poisons, and that their qualification is not a safeguard; also that it is inconvenient to limit the sale of poisonous preparations to chemists. In reply to questions by Professor Thorpe, he stated that his firm get arsenic from Cornwall in casks by rail which are not labelled "Arsenic" or "Poison." The casks are strong and never broken. Replying to Dr. Stevenson, he stated that his

* The subjoined is interesting in this connection:—

Wholesale Dealing.—"The business of wholesale dealers in supplying poisons in the ordinary course of wholesale dealing" is not to be interfered with by Sections 1 to 15 of the Act, and, according to Section 17, sales of poisons "by wholesale to retail dealers in the ordinary course of wholesale dealing" are exempt from entry in the poison-book, while the labels need not bear the name and address of seller. Note this clear definition, for it shows what a wholesale transaction is—*viz.*, a sale by a wholesaler, manufacturer, retailer, or other person to a retailer.—THE CHEMISTS' AND DRUGGISTS' DIARY, 1903, page 288.

firm sell their goods to at least 150 chemists direct, but a good deal goes through wholesale houses. He could not state the proportion sold by retailers who are not chemists. Dr. Stevenson also questioned him as to the poison regulations applying to other dealers than chemists. Witness was of opinion that farmers generally know the poisonous nature of sheep-dips and insecticides, and, in reply to Mr. Martindale, stated that the far-reaching nature of the Pharmacy Act tends to hinder the use of these articles. Asked how he would modify the law, he said they might put agricultural poisons on the same footing as the carbolic-acid order. Speaking of profits, he said that co-operative societies sometimes sell his goods lower than the firm can sell to them. This was elicited by Mr. Cross, who put other questions in regard to the poison monopoly, and witness gave a good deal of information as to how business in agricultural poisons is done.

Mr. J. L. Major was next examined. He started by handing in a petition by the Tar-distillers' Association for alteration of the Pharmacy Act, which was the same as that of Mr. Dobbs's Society. It was signed by thirty-five persons interested in the tar-distilling trade. Mr. Major was examined at considerable length in regard to the scheduling of carbolic acid, and stated how accidents arise, also that he was averse to anything that would restrict the sale of carbolic acid and not permit it to be dealt in by regular traders with due regulations. He would put carbolic acid into specially sealed hottles or packages, which should not be broken into before sale, and label them "Poison," and would make no limit of percentage of phenols as long as the stuff was miscible with water. Mr. Martindale examined him as to the records of deaths from carbolic acid in 1897, 1898, and 1899, and witness, in the course of his replies, said he certainly thought there should be restrictions on the sale of non-miscible carbolic acid, but not on the people who sell it. Mr. Martindale put it to him that his particular grievance against the Pharmacy Act was that it stood in the way of pushing his wares, but he denied this, his objection being that it stops the proper use of disinfectants. Eucryl, he stated in reply to Professor Tilden, contains cresol of specially high grade. He considered that the carbolic-acid order should apply to other disinfectants as dangerous as are those of phenaloid nature.

SIXTH DAY.

Mr. James Cockburn was called on Thursday, December 19, 1901, and Professor Thorpe started his examination. Mr. Cockburn stated that he was trained in Southampton, was an assistant there for a year or two before going to Scotland, and was in business in Manchester, but not for long. He considered the present system of keeping open shops for the sale of poisons unsatisfactory because it rests with the Pharmaceutical Society to say whether the keeping is in accordance with the Act or not. He suggested that every shop for compounding medicines and the sale of poisons should be registered. This would enable the Pharmaceutical Society to lay their finger upon a shop and know how it is conducted; moreover, he would have a qualified man in charge. Witness told what the Pharmaceutical Society had done as regards doctors' shops in Glasgow, and informed the Committee that Mr. Rutherford Hill had had a conversation with him the previous week regarding his evidence. His next suggestion was that poisons in sealed packets should be sold by anybody under certain conditions, while he was of opinion that the qualified man is not in a better position than the ordinary trader of knowing what is in them. This applied to agricultural poisons and photographic chemicals as well as proprietary articles. The scheduling of carbolic acid had, he said, diminished the sale by unqualified persons, but he himself sold ten or twelve barrels more a year. Witness then proceeded to tell the Committee that the present restrictions are unnecessary and ineffectual, especially in regard to poisonous proprietary articles, as chemists do not get the signature for them in all cases. The general run of pharmacists, he said in reply to Professor Thorpe, are lax in working the Pharmacy Act. For instance, he said, we sell Burroughs & Wellcome's tabloids "containing arsenic and strychnine, but do not take the signature for them at all times." He considered that the Pharmaceutical Society is not an impartial body in its method of prosecuting illegalities, and quoted some correspondence with Mr.

Rutherford Hill in support of that contention; but while giving his evidence on this point Mr. Martindale called his attention to the fact that it is the Registrar of the Society in London, and not the Assistant-Secretary in Edinburgh, to whom information respecting cases of infringement should be given. To that, witness replied that Mr. Hill assumed the responsibility and conducted the prosecutions in Scotland. He was then taken through the whole field of the sale of poisons, the Committee specially aiming to get information about how chemists and druggists know the nature of proprietary medicines. Mr. Martindale suggested that it is their duty to analyse them if necessary, and to that witness objected.

Mr. W. Darlington's evidence, which followed, told of the difficulty that the agricultural society which he represented had in getting sheep-dip at a reduced price, because the Pharmaceutical Society (!) had come down upon the chemists and druggists and said, "You must not sell this dip under a certain price." This was said to the chemists of Malvern and Worcester! He told the Committee a good deal about dipping, what it costs, and so on. The opinion which ran through his evidence is fairly embodied in this paragraph:—

If the chemist had not the real monopoly of sale it would be a very great benefit to British agriculturists, because it is well known to everybody who is connected with the soil, as I am myself, that we must get everything we can, or we cannot compete with the foreigner, and if we get obstacles put in our way we cannot make the best of ourselves.

Mr. R. H. Smith's evidence concluded the day's sitting. He claimed that ironmongers were the first distributors of sheep-dips and similar agricultural preparations, and they sell them at a smaller profit than chemists. They would fall in with any regulations imposed upon them as to the sale of poisons if the law was altered.

SEVENTH DAY.

The Committee met on Thursday, February 6, 1902, but immediately adjourned owing to the death of Mr. Martindale.

EIGHTH DAY.

On Monday, March 10, 1902, all the members (Mr. Walter Hills for the first time) were present, except Mr. Cross.

The first witness was Mr. Richard Bremridge. In reply to Professor Thorpe, he explained what the Society does in regard to infringement of the Act, the difficulties it meets, and how advantageous would be greater power as to ascertaining who manages shops. Mr. Hills brought out the fact that the Council's Bill covers the last point. Then Professor Thorpe resumed the examination, and soon "XL-All" insecticide came in, for witness told the Committee of the sale of it in a brandy-bottle by a seedsman who did not know that it is a poison. He assured Professor Thorpe that there is no restriction by law on the use of the word "poison"; it may be applied to other articles than scheduled poisons. He submitted particulars of the constitution of the Society and its duties under the Pharmacy Act, and disclaimed the suggestion that the Society is a trading body. He explained how infringements of the Act are investigated, and gave proof that prosecutions are undertaken impartially. He submitted a return of the prosecutions conducted by the Society during 1899, 1900, and 1901, which is printed in the minutes as an appendix. It contains the names and addresses of all the persons implicated. For legal reasons we cannot reproduce this, but the following is the summary:—

Proceedings under the Pharmacy Act, 1868, Section 15.

Unqualified proprietors of drug-stores and their unqualified assistants	132
Unqualified assistants of members of the Pharmaceutical Society and of other registered chemists and druggists ...	109
Unqualified assistants to limited companies carrying on the business of chemists and druggists	36
Unqualified assistants in doctors' open shops... ..	22
Unqualified assistants to executors of deceased registered chemists and druggists	5
Grocers (23), herbalists (9), drysalters and oilmen (7) ...	39
Seedsman and florists	6
Other traders	5

Note.—Members of the Pharmaceutical Society and other registered chemists and druggists, being by statute the legal

sellers of poisons, cannot be proceeded against under the 15th section of the Pharmacy Act, 1863, for the retailing, dispensing, or compounding of poisons, or for keeping open shop for that purpose.

Proceedings under the Pharmacy Act, 1863, Section 17.

Limited companies...	6
Members of the Pharmaceutical Society and other registered chemists and druggists...	4
Doctors of Medicine	2

Proceedings under the Pharmacy Act, 1852, Section 12.

Limited company	1
Total	367

This furnished the Committee with material for questions, which brought out much detail as to the Society's efforts to enforce the law, and the difficulties they have in doing so. There was an interesting passage in regard to prosecutions in Scotland under Section 17, and the Court of Session decision on the point was explained, Mr. Bremridge saying the result of this was that the Registrar was ruled to be "the proper prosecutor." When this came out, Mr. Harrison put the important question, If the law is declared to be so in Scotland, presumably until it is upset it will be the same in England? To this witness replied, "But are not the proceedings different in the courts in England and Scotland? You see they are different courts. Under the Act of 1852—" [We give the rest *verbatim*.]

(*Professor Thorpe.*) The procedure may be different, but the law is another thing. What Mr. Harrison is saying is that this is a declaration by three Scottish Judges interpreting the law which applies in England and Scotland, and his contention is, so long as that is not contested it remains the law, and is hindering in England.

(*Mr. Harrison.*) It is the declaration of what the meaning of the Act is merely.

(*Witness.*) Well, hut, Mr. Harrison, how can that be if the law in one part of the country is the same as in another part: if I can prosecute, and have prosecuted, here under the 17th Section, then, directly I go over the Border, how is it that I have been prevented from doing so?

(*Mr. Harrison.*) The law is the same, but the interpretation is different. Now you have an interpretation, and prescribed in the 17th Section, which was accepted, and now you have a decision that you can be the prosecutor in Scotland; and therefore the law is declared the same—in one case by a definite declaration, and the other goes by practice.

Other matters were then taken up. Mr. Bremridge told Professor Thorpe that the Society has consulted Mr. Vaughan Williams and Mr. Burton Buckley in regard to company matters, but there is no standing counsel. He also explained the agency-case, which arose through the alleged sale of weed-killer at Worcester. Some of witness's replies were a trifle caustic—*e.g.*, when Professor Tilden recalled the allegation that there is difficulty in getting weed-killers, and so on. Mr. Bremridge: "Does the consumer say that? I have read of this difficulty in those philanthropists' evidence who want to sell these poisons to the consumers." Replying to Dr. Stevenson, he said that in these agency-cases the Society has no power to act. He explained the Wheeldon case to Professor Thorpe, and gave Mr. Harrison further particulars regarding legal procedure, which, he added, costs the Society 700*l.* a year beyond the penalties. The Committee seemed astonished that all this should come out of the Society's pocket, and Professor Thorpe asked, Why not move the authorities to apply to be relieved of the pecuniary loss? "We shall take the hint," replied the witness; and he assured Professor Thorpe that it really does not come out of the members' pockets, as the examination and registration fees pay the way. Mr. Cross had expressed a wish to "cross-examine" the witness, but was not present, and a footnote to the minutes says, "The witness was not re-examined."

Mr. J. Rutherford Hill was called in connection with Mr. Cockburn's evidence, and he read a statement, in the course of which he said:—

The statements made by Mr. Cockburn in regard to the administration of the Pharmacy Acts in Scotland are not in accordance with fact. The case Mr. Cockburn reported rather less than fifteen years ago does not in the slightest degree hear out

the conclusion he attempts to draw from it. The case was like this: There were two brothers in the same town; call them James and John Thomson, the former being a qualified chemist and the latter not. James kept an open shop, and had on the sign and on his labels, "J. Thomson, chemist." A second shop was opened, and John was employed in it, the same words—"J. Thomson, chemist"—being on the sign and labels of this second shop. Mr. Cockburn in his complaint alleged that the real owner of this second shop was John Thomson, and he asked the Society to prosecute him. [Letters were produced to show that the Society acted promptly.] I incidentally discovered, also, in the course of my inquiries, that his extraordinary anxiety to procure the prosecution of Thomson arose from personal considerations. I continued my inquiries in this case over two years, and never discovered any evidence of any offence beyond the unsupported assertion of Mr. Cockburn. . . . I absolutely deny that any difference is made between members and non-members, and I have shown that the only case employed by Mr. Cockburn as illustrating his contention entirely disproves it. . . . No warning is ever given either to a member or to a non-member if information of an offence is lodged. . . . I have no responsibility for prosecutions in Scotland, and did not pretend to Mr. Cockburn that I had. . . . The Registrar is the person who alone is authorised to conduct such prosecutions in Great Britain.

Mr. Hill also emphatically denied other statements made by Mr. Cockburn.

Mr. W. L. Muir, L.R.C.P., gave evidence as to doctors' shops in Glasgow. Of this we gave an abstract at the time.

NINTH DAY.

Mr. Conrad Beck was the first witness on Tuesday, March 11, 1902. Replying to Professor Thorpe, he stated that he was there to urge that the sale of photographic chemicals should not be confined to chemists, but should be permitted to be sold by all dealers in photographic materials, provided they comply with the sale formalities as the chemist does. Mr. Hills asked witness some pointed questions on the subject with a view to showing that amateur photographers are well supplied by chemists and druggists throughout the country, who have taken up this business largely. Witness thought there are 700 or 800 chemists who so trade, and that they have taken up the sale of photographic appliances through the chemical portion of photography. He was also questioned as to the sale of pyrogallol and osmic acid, the latter being sold in sealed tubes for staining nerve-tissue.

Mr. Le Neve Foster was then examined as to the precautions which, in his judgment, should be taken for the retail vending of liquid carbolic acid. His firm suggested that it should only be sent out in a distinctive bottle, and he produced one of Calvert's which was ribbed and had a spiked stopper. They also use distinctive labels. Dr. Stevenson put some very straight questions in regard to Calvert's 50-per-cent. carbolic tablets, which, he said, are just like jujubes. Witness stated that, being solid, they are not included in the schedule. Professor Thorpe also thought the tablets were very suggestive of being an article of confectionery; and Mr. Hills pointed out that the tablets were not labelled "Poison," and dissolved easily in water. He suggested that the words "Poison" and "To be kept from children" should be placed upon each tablet. Witness explained that the tablets had been in use since 1879, and the sale had not increased since the scheduling, but was at a standstill. He did not think there was any difficulty in supplying small quantities of liquid carbolic acid through registered chemists. Orders from borough and district councils are regarded as wholesale transactions. His definition of wholesale dealing was the supply to persons who sell again, or to persons who use what is sold for manufacturing purposes. Mr. Hills, who elicited this explanation, said he did not disagree.

Dr. R. B. Selby was the next witness. He said it would not be advisable to restrict the sale of sheep-dips and weed-killers to chemists and druggists, and he did not think it would be possible to enforce the provisions of the 1863 Act without causing considerable inconvenience to the agricultural community. Witness dispenses his own medicines, and he informed the Committee that the Act had been of no inconvenience to him. He was examined by Mr. Hills as to the druggists in the district where he practises, especially regarding the sale of agricultural poisons, and stated that he knew of several ironmongers in Wigtownshire who had sold such things for the last thirty years.

Mr. H. Cannell's evidence, next taken, was largely in

regard to the increased use of insecticides in horticulture and floriculture. Up till the first "XL-All" insecticide case his firm had sold poisonous compounds such as it; then they discontinued selling, "to the very great detriment and loss of business." The firm again sell them, having been informed by the makers, he thought, that they could sell them in the sealed bottles. There were some interesting questions put to him as to Mr. Frank Cox, chemist, Swanley, who appears to be an enterprising man; and this matter was brought in through Mr. Hills wanting to know why the nicotine insecticide could not be purchased locally through a chemist. Witness was also examined as to the sale of weed-killer, and before his evidence closed he handed to the Chairman a petition in favour of Mr. Dobbs's Bill, bearing 1,905 signatures.

TENTH DAY

On Wednesday, March 12, 1902, Professor Thorpe and Professor Tilden were not present. The first witness was Mr. J. Bowen Jones, who corroborated previous evidence that chemists and druggists are unable to recommend specific remedies for agriculture and horticulture, as they are merely sold in tins, and as the chemists do not know anything about them they can give no instructions. Witness said that a nurseryman or a florist who is himself a cultivator is able to recommend the proper articles. On behalf of the Chemical Committee of the Royal Agricultural Society he recommended that the poisons schedule should be altered either by the removal of compounds used in agriculture and horticulture to another schedule, or in some other way to exempt them from section 15 of the Act. He considered the Pharmaceutical Council should not have the right to add to the poisons schedule without the approval of the Board of Agriculture, and suggested a Part 3 of the schedule. He was questioned in regard to certain poisons and how to deal with them; and when Mr. Hills took up the examination prices came in, witness stating that he had heard of "Boots' shops being established, where they sell cheaper than the other chemists," but he could not give any instance except Boots to show that persons who have the exclusive sale of poisons charge an unreasonable price.

Dr. Voelcker sat beside witness, and occasionally replied to some of the questions put.

The next witness (Mr. W. J. Leggett) said he had been deputed to give evidence on behalf of the Association of Patent-medicine Vendors, and Mr. Hills asked him to define what a "patent medicine" is. Witness complained that since the Pharmaceutical Society had interfered with the sale of poisonous proprietary medicines sales had decreased terribly. He quoted some remarks by Mr. Moir, chemist, Glasgow, to the effect that "chemists themselves were a good deal to blame for the patent-medicine grievance." He named, as amongst the most largely sold patent medicines, Winslow's syrup, Owbridge's tonic (which no longer contains poison), Kay's compound essence of linseed, Bateman's drops, and Atkinson & Parker's infant preservative. The sale of these medicines by members of his Association had seriously diminished. Witness also expressed his opinion as to what should be done with the poisons schedule, and had a good deal to say in regard to Part I, emphasising the statement that chemists do not register sales of Fellows's syrup, while the Stores do, and he explained some of the actions brought by the Pharmaceutical Society that his Society have had to fight.

Mr. Arthur W. Lobb was the last witness, and he expressed the co-operators' views. He objected to the monopoly given by the Pharmacy Act to chemists, and assured the Committee that chemists take advantage of it to charge more for articles containing poison. He proved this with Fenning's lung-healers and Fenning's fever cure, which are the same wholesale price, but in two instances in Liverpool and Manchester the purchaser was charged 1½% more for the one containing poison. Asked by the Chairman why co-operative societies want to sell patent medicines, he replied, "Because they do not want their members to be driven into chemists' shops to buy other articles." "But this is a free country, is it not?" again queried the Chairman. "It is not free," said the witness; "we are not free to sell these goods." Mr. Hills gently drew him over the thin ice of the wine, spirits, and beer trade, but the witness failed to see the analogy. Then followed these questions and answers,

which brought the public inquiry to a close. The questions were put by Mr. Hills:—

You have mentioned certain test-cases in Liverpool and Manchester?—Yes.

Are there not a great many chemists in both those large centres who will sell at a very low price?—Possibly. We went to the best chemist in each town.

What do you define as the best chemist?—The most respectable.

And not those in the lower district?—No.

Do not you think, if you had gone to that district where the prices generally rule lower, you would have got it for less?—I do not know.

You said you went to the best chemist?—Yes.

I think you answered the Chairman just now that you thought that these proprietary medicines containing scheduled poisons did no greater harm when sold by your Society than when sold by chemists?—Absolutely.

Did they do any more good?—I would not like to say what amount of good they did. We do not know that. I imagine that you are a chemist, and perhaps you know. We do not know. We are just guided by the demands of our members.

A nice ending, truly. To the minutes are appended a dozen documents, the more important of which we have referred to.

South African News.

(From our own Correspondents.)

TRANSVAAL TRAVELLERS' TAX ABOLISHED.—The Transvaal *Government Gazette* for January 9 contains the text of an ordinance (No. 50 of 1902) providing that so much of Article 6 of Law No. 17 of 1899 as imposes a licence upon persons exercising the profession of advocate, physician, surgeon, dentist, or commercial traveller shall be repealed as from January 1, 1903. The tax on commercial travellers was 20% per annum, or 10% for six months.

ALLEGED FORGERY.—Herbert Netherton Clayton, *alias* Lionel H. Biggs, described as a medical student, was before the Magistrate at Wynberg, Cape Colony, on January 21, charged with fraud, he having issued cheques on the Standard Bank of South Africa (Limited), and signed same "J. D. Cartwright," the name of a well-known Cape Town merchant. When arrested accused said he was guilty, and volunteered the information that there would be five more cases. He was remanded.

CAPE DOCTORS.—Licences have been issued authorising the following to practise as medical practitioners in Cape Colony: Nathaniel Augustus Butterfield, M.R.C.S., L.R.C.P. (formerly of Walton-on-the-Naze, Essex); Andrew Gordon Watson, M.B., B.S. (late Civil surgeon, Field Force, South Africa); Henry Peet, M.B., D.P.H. (formerly of Brownlow Hill Workhouse Infirmary, Liverpool); Thomas Nicolaus Stuart, L.R.C.P., L.R.C.S.E. (not on Medical Register 1902); Walter Shanks, M.B., B.S. (late of International Hotel, Bray).

BUSINESS CHANGE.—Messrs. Heynes, Mathew & Co., wholesale druggists, Cape Town, took over the stock, books, &c., of the firm of Messrs. J. T. Pocock & Co., also of Cape Town, some months since, but the formal transfer has been delayed owing to some details and the absence of the former proprietor, Mr. W. F. H. Pocock, and was only completed just prior to the departure of the last mail. All communications having reference to the late concern should be addressed to the new proprietors Messrs. Heynes, Mathew & Co., at their headquarters, Cape Town.

PLAGUE IN NATAL.—When the mail left there were in hospital at Durban suffering from plague, three Europeans, nine natives, and three Indians. The outbreak is by no means serious, writes our correspondent, but may soon become so if not properly looked after, owing to the coolies and Kaffirs leaving Durban for the inland places. The feeling in Durban is high, as many people think the Corporation is not taking strong enough measures to counteract the epidemic, and that too little money is being spent. Chemists are doing good business in disinfectants, most of the talk in pharmacies being about the plague possibilities.

Adulterated Copaiba.

By E. J. PARRY, B.Sc., F.I.C.

ALTHOUGH it is well known that the British Pharmacopœia made a mistake in its description of copaiba by quoting optical rotation for 200-mm. tubes instead of 100-mm., there is no doubt that, after correcting this clerical error, the pharmacopœial limits for the optical rotation of the essential oil are not sufficiently wide, and many samples of pure copaiba will not satisfy the B.P. requirements (corrected). The limits usually accepted for oil of copaiba are -7° to -35° . I have met with many samples with rotation between -9° and -12° , which were all direct imports and apparently genuine. But there is at the present time a large amount of adulterated copaiba on the market, and of the last twenty I have examined eight yielded an essential oil either dextrorotatory (up to $+28^{\circ}$), thus indicating African copaiba, or levorotatory from -50° to -60° , due to the presence of gurjun balsam, as also shown by the usual colour-reactions. The majority of such samples appear to have arrived in London *via* Hamburg.

Dental Advertising.

IN order to make complete our record of the Dentists Act case against Mr. Templar Malins, which the Cardiff Stipendiary has dismissed on the facts, we now give reduced facsimiles of the two folders upon which the action was based:—

Remember!
No two mouths are alike; and, though you may get into someone else's shoes, you CAN'T WEAR OTHER PEOPLE'S TEETH. Keep your natural ones if you can, and if not, then

KEEP THIS LIST,
it may save you money.

Special Note.—The teeth supplied by

TEMPLAR MALINS
are not made from bone or ivory, but from porcelain of various grades tinted with precious metals to make them appear

LIFE-LIKE TEETH.

Lovely Teeth
SUPPLIED BY

TEMPLAR MALINS

A Complete SET
(Upper or Lower)
FROM
One Guinea
Ask for Revised Price List.

ONLY ADDRESS:

CHEMIST
Templar Malins,
King's Chambers,
29 Queen Street, Cardiff.
HOURS 10 to 8.
(Except Wednesdays 10 to 4.)

The above are (1) the first page of the revised price-list, and (2) the first and fourth pages of the folder which has inside it the following:—



LOSS OF TEETH MEANS
LOSS OF HEALTH.

This Young Lady spent
30s.
on her Mouth.
Was it not well spent?
Fine Clothes are no attraction if the Mouth is ragged.



PRETTY TEETH ARE
ATTRACTIVE.

The original measures $5\frac{3}{4}$ inches by $3\frac{3}{4}$ inches. The girl's face and bodice are tinted pink. The interior of the price-list is subjoined:—

JUNE 1902

CHEMIST

Previous lists cancelled

TEMPLAR MALINS

REVISED PRICE LIST

OF

Artificial Teeth

INCLUDING EXTRACTIONS WHEN NECESSARY

SPECIFICATION of QUALITY	Each case of 10-4 TEETH		COMPLETE SET	
	Upper & Lower	Upper & Lower	Upper & Lower	Upper & Lower
A BEST TEETH in 18 CARAT GOLD Material in which they are set Specially Toughened	1.0.0	16.6	8.10.0	14.10.0
B BEST TEETH in DENTAL ALLOY Specially Toughened	10.6	8.6	4.10.0	8.10.0
C BEST TEETH in EBONITE Wonderfully light & strong	7.6	6.0	3.3.0	5.5.0
D TEETH in BROWN VULCANITE Second Quality	5.0	4.0	2.2.0	3.10.0
E HOLLOW TEETH in Orange Colour Vulcanite	2.6	2.0	1.1.0	2.0.0

**KING'S CHAMBERS,
29, QUEEN STREET, CARDIFF.**

This measures 6 inches by 5 inches. The marginal lines are in red ink, and the fourth page of the list bears a calendar for 1903.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. DALTON, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," February 4, 1903.)

- "MOSKOLA"; for medicated and toilet creams. By A. Kemp and H. C. Hurlbut, 70 Vincent Square, Westminster. 250,570 and 250,571.
- "EMMORA" and "UNCORA"; for chemicals. By John Birch, 37 Frederick Street, Rotherham, Yorks, chemist. 251,087 and 251,089.
- "RHODIA"; for chemicals. By the Société Chimique des Usines du Rhône, Saint-Fons, c/o Mewburn, Ellis & Fryor, 70 Chancery Lane, W.C. 251,149.
- "PRESERVALLINK" (no claim for "Preserve"); for food preservatives. By the Preservalline Manufacturing Company, New York, c/o W. P. Thompson & Co., 6 Lord Street, Liverpool. 247,370.
- "OXADE"; (no claim for "Ox"); for food-substances. By Liebig's Extract of Meat Company (Limited), 9 Fenchurch Avenue, E.C. 251,176.
- "DE-FIZZ-IT"; for aerated waters. By J. O. Comrie, 686 Garscube Road, Glasgow. 250,767.
- "VYRA"; for household soap and soap-powders. By G. J. Moulton, Rulow House, Buxton Old Road, Macclesfield, chemist. 250,552.
- "SULPHOSIL" (no claim for "Sulpho"); for soap-powders. By the New Hydroleine Company (Limited), Ashby-de-la-Zouch. 251,048.
- "GLYQUA"; for soap, detergents, &c., and for perfumery and toilet-articles. By Allen & Hanburys (Limited), Plough Court, Lombard Street, E.C. 251,354 and 251,355.
- "COUNTRY GIRL"; for perfumery and toilet-articles. By Alwyne Dyson (Limited), 67 1 Street, Newcastle-on-Tyne. 249,898.

The Assistants' Page of News.

THIS WEEK'S "C. & D." IN BRIEF.

THE POISONS COMMITTEE'S REPORT was made public on Tuesday, and is printed on p. 321.

THE COMMITTEE says arsenic is carried in a lax manner;

THAT the Pharmaceutical Society has an onerous duty in prosecuting offenders; and

THAT farmers and gardeners suffer inconvenience through the poisons restrictions.

THE COMMITTEE recommends certain additions to the schedule which the Pharmaceutical Council may make next month; and further,

THAT preparations of arsenic, tobacco (or its alkaloids), and carbolic acid for certain purposes should be sold by anybody. For this a new Act will be necessary.

WE summarise the evidence on p. 325;

CRITICISE the report on p. 306; and

FURTHER NOTES regarding it will be found on p. 289, p. 292 p. 304, and p. 308.

AN important tabloid case is coming along (p. 290).

ALDERMAN J. L. SEATON, pharmaceutical chemist, of Hull, is dead (p. 303).

MR. DAVID HOWARD is President-elect of the Institute of Chemistry (p. 290).

COCAINE-PURCHASERS whom chemists are asked not to supply are referred to on p. 292.*

ADULTERATED COPAIBA is still common on the market, Mr. Parry says in a note on p. 332.

A MIXTURE of salts for analysis is to be distributed to applicants on February 25 (p. 290).

DOVER CHEMISTS discussed the Poisons Committees report on Wednesday evening (page 310).

THE provisional programme for the B.P.C. meeting at Bristol on July 27 to 30 is printed on p. 290.

THIRTEEN CHEMISTS have got "off" wine-licences this week, and ten have been refused (p. 292).

A PETITION to proprietary-manufacturers is a feature in Association reports this week (pp. 301-3).

MR. T. TYLER has secured a concession from the railways in regard to the carriage of ether (p. 299).

THE INTERNATIONAL PHARMACOPEIA is moving on. Our Paris correspondent sends a note about it (p. 294).

SIR WILLIAM RAMSAY has not much faith in University degrees, and has written an article on the subject (p. 304).

IT was not a Boots' assistant who was fined in the Bloomsbury County Court last week, but one of Mr. Boutall's (p. 309).

THE SYRUP-OF-FIGS DECISION gives "Xrayser" the opportunity for some pleasant reflections on the poetry of pharmacy (p. 305).

PROFESSOR W. A. TILDEN is to be the next President of the Chemical Society, and Professor W. P. Wynne the junior Secretary (p. 298).

MR. KIRKBY's scheme for a university curriculum for pharmacists provides for a three-years' course. He does not mean it for ordinary druggists (p. 299).

MR. R. H. JONES says the declaration which Minor candidates have to submit as to their experience in dispensing is too frequently a formality, and he suggests greater stringency (p. 298).

AN interesting report on the purity of commercial drugs was submitted by Mr. M. Meldrum to the North British Branch this week, and was followed by a discussion on standardisation (p. 296).

A LIVERPOOL CHEMIST sold a hot-water bottle, which burst, when filled, on a woman's stomach. She and her husband sued for 800l damage, but the jury did not agree on all points (p. 310).

THE SUMMONS UNDER THE DENTISTS ACT against Mr. Templar Malins has been dismissed on the facts by the Cardiff Magistrate (p. 311). We discuss the matter on p. 307, and print facsimiles of the advertisements on p. 332.

MR. ALEXANDER CROSS, M.P., who is not quite pleased with the Poisons Committee's report, is director of a company which the Pharmaceutical Society is prosecuting for selling an arsenical anti-destroyer contrary to Section 17 of the Pharmacy Act (p. 209).

MAINLY PERSONAL.

WE ARE GETTING more letters than we can print about qualified assistants serving limited companies.

PROFESSOR H. G. GREENISH's book on pharmaceutical microscopy is to be published one of these days by Messrs Churchill.

MR. W. A. SHEPARD, pharmaceutical chemist, of Hammer-smith, has purchased Mr. H. A. Gibson's old-established business in Bridge Street, Spalding.

THE BUSINESS formerly carried on by Mr. W. H. Hooton chemist and druggist, at 186 Spring Bank, Hull, has been acquired by Messrs. Milburn (Limited).

MANY an old Metro. man knows Mr. Geo. Branch, the old demonstrator. He is heavy on botany, but the Chemical Society elected him a fellow thereof this week, also Mr. D. J. Williams.

MR. W. WATSON-WILL, Principal of the Metropolitan College of Pharmacy, has been installed S.W. of the Freemasons' Lodge of Fidelity, No. 3. Mr. T. W. Robson, of Tiverton, is J.D. of the same lodge.

CARDIFF ASSISTANTS are not so active this winter as they were a year ago, for they have got down to the stage of discussing general matters. They are, however, to have fortnightly lectures on Minor matters.

MR. F. W. JACKSON, chemist and druggist, from Ashton-under-Lyne, has acquired the business at 87 Walton Road, Liverpool, lately belonging to Warhurst (Limited), and one of the sixteen shops opened by the late Mr. W. T. Warhurst.

MR. THOMAS BARRON, chemist and druggist, 1 Albany Street, Edinburgh, who managed Messrs. T. & H. Smith's retail business at 21 Duke Street, Edinburgh, for the past five years, has acquired all the prescription-books and recipes belonging to that business.

THE Westminster College of Pharmacy students had a lively smoking concert at the Bridge House Hotel on Tuesday evening. Mr. G. S. Valentine Wills was born on St. Valentine's day, and the celebration of that event was the occasion. He got a standard lamp in hammered iron and copper on this occasion, Mr. Stokoe making the presentation in a speech which even a pharmaceutical councillor could not beat.

MR. MICHAEL CARTEIGHE is to preside at a smoking concert of the Inter-Col. football league next month, and is to present the cup. Mr. Carteighe knows how to kick a ball into goal, and has done it often. The "Square" team met the London College one in an inter-college match last Saturday, and beat them by three goals to one.

The League table to date is as follows:—

Team	Played	Won	Drawn	Lost	Points
{ London... ..	5	4	0	1	8
{ "Square"	5	4	0	1	8
Muter's	5	1	1	3	3
Metropolitan	5	0	1	4	1

THE football-match played between the Metropolitan College of Pharmacy and the War Office Reserves on February 14, at Shepherd's Bush, ended in a win for the War Office by two goals to one.

WHEN YOU WANT TO STUDY for the Minor you should seek the advice of the principal of some college of pharmacy who advertises in THE CHEMIST AND DRUGGIST. The announcements in this issue are by the following:—

Westminster College, Trinity Square, Borough, S.E.

London College, 323 Clapham Road, S.W.

South London College (Muter's), 325 Kennington Road, S.E.

Metropolitan College, 160 & 162 Kennington Park Rd., S.E.

Central School of Pharmacy, 2 Charterhouse Street, Holborn Circus, E.C.

Royal Dispensary, 21 West Richmond Street, Edinburgh.

Leeds College of Pharmacy, Leeds.

Liverpool School of Pharmacy, 6 Sandon Terrace, Upper Duke Street, Liverpool.

A postcard to the Principal of any of these will bring you the prospectus. Mention the C. & D. when writing.

Exchange Column—Bargains.

TERMS.

DEPOSIT.—The purchaser of anything advertised in the Exchange Column may remit the amount to us, and we only pay the money deposited on advice from the remitter. We charge a commission of 6d. on any transaction of £3 or less, or 1s. if above that amount, which is payable by the purchaser.

Limited to the Advertisements of Surplus Stock, Shop Fittings, Apparatus, Photographic Goods, Books and Periodicals, Formulæ, Addresses Wanted, and Articles Wanted.

1^{**d.**}**2** per word with name and address. **1d.** per word if we register the address and attach a number.

No Advertisement inserted for less than **6d.**

Remittances payable to **EDWARD HALSE**, and crossed **MARTIN'S BANK, LIMITED.**

FOR DISPOSAL.

APPARATUS.

Cash offer wanted for Pindar's eccentric pill-coater, with sifter; cost 75s.; carriage forward. RUDD, Chemist, Ripon.

BOOKS AND PERIODICALS.

Cooley's "Cyclopædia," 4th edition, enlarged; Thompson's "London Dispensatory," 8th and 11th editions; Redwood's "Supplement to R.P.," 3rd edition. J. PORTER & SON, Coalville.

Minor books.—Newth's "Chemistry," 4s. 6d.; Kipping's "Organic," 3s. 6d.; Lowson's "Botany," 3s. 6d.; Wills's "Pharmacy," 3s.; Wills's "Volumetric," 1s. 6d.; Oliver's "Elementary Botany," 2s. SPOUNCE, Gainsborough.

Scott's, Green's, Potter's, and Strasburger's "Botany"; Lummer and Coles's "Photo-Optics"; Hatridge's "Refraction"; Wills's "Materia Medica"; U. C. O. "Heat, Light, and Hydrostatics"; Pendlebury's "Arithmetic"; Todhunter's larger "Algebra"; H. Smith's "Trigonometry"; Glazebrook's "Heat and Light"; Meldola's "Photo-Chemistry"; Wade's "Organic"; Clowes's "Quantitative"; Chapman Jones's "Photography"; De-chanel's "Philosophy"; offers wanted. "C.," 109 Fentiman Road, Clapham, S.W.

DRUGS AND CHEMICALS.

Overstocked.—56 lbs. ext. hyos., 2nd hien., B.P.; what offers, whole or part? 223/13, Office of this Paper.

FORMULÆ.

For sale.—Formula for milk-of-roses skin-lotion; also tooth-paste; 1s. each. 79/23, Office of this Paper.

For photographic chemists.—Thoroughly reliable formulæ; combined bath for P.O.P. (warm brown to purple-black tones), cone one-solution developer, cheaply, easily made; satisfaction guaranteed; 1s. each, 2 for 1s. 6d. "ARTIST," Kelvin House, East Molesey, Surrey.

OPTICAL AND PHOTOGRAPHIC.

Large powerful microscope by Field; 2 eyepieces; $\frac{1}{8}$, $\frac{3}{8}$, and $1\frac{1}{2}$ in. objectives; sub-stage, condenser, and numerous accessories; £5 10s. SHEPHERD, 79 Grosvenor Road, London, N.

PROPRIETARY ARTICLES.

1 doz. Savory & Moore's food (1s.); what offers? PATEMAN, Dunstable Road, Luton.

Overstocked.—1 doz. 1s. 1½d. Bile Beans, 11s. 6d.; 1 gross Steele's ½-lb. patent packets chloride lime, 7s.; either carriage paid; cash with order. 79/17, Office of this Paper.

SHARES.

Shares for sale.—See Miscellaneous column (page 66).

SHOP FITTINGS.

Mahogany desk-case, as Maw's fig. 15, 50s., cheap; brass standard scales, mahogany, with drawer, 15s. APPLETON, Darnall, Sheffield.

Mahogany hant-front counter show-cases; best plate; 17" × 8 deep × 14 high; suitable for chemists or dentists. BARNETT & Co., Perfumers, Birmingham, have several for sale below cost.

MISCELLANEOUS.

Electric-lamp (2-volt); 7d., post free. P. ROWSELL, 9 Derwent Grove, E. Dulwich.

Leath & Ross' £5 homœopathic case, complete; what offers? BELL, Chemist, Southsea.

Student's complete parts of human skeleton, in box; 42s., or offer. 56 High Road, New Southgate.

Stethone, fig. 184/5, and phonoscope, fig. 1084/6, Lynch; never used; offers. PRIME, Chemist, Norwood.

National cash-register; cost £45; will accept £30; in perfect order. VAUGHAN, 14 Leighton Street, Leeds.

Barstow's patent stone filters.—1 3-gal., 12s. 6d., cost 13s. 6d.; 1 2-gal., 10s., cost 15s. 4d.; 2 1½-gal., 9s., cost 12s. 3d.; all new. BURNETT Sherborne.

Overstock.—1 gross of sponges (choice honeycomb); splendid 1s. line; 4s. 6d. sample dozen, carriage paid, cash with order. RICHMOND, 31 High Street, Sutton, London.

56 lbs. boric acid; 1 upright showcase; 2 air-cushions, 15" × 15", 16" × 12"; 28 lbs. acetanilid; 9 lbs. eucalyptus oil; 1 gross 8-oz. and 9 oz. rounds; 6 lbs. surgical tubing (red); part or whole. MITCHELL, Fagley Road, Bradford.

WANTED.

Old electric lamps and scrap platinum. P. ROWSELL, 9 Derwent Grove, E. Dulwich.

Microscope, s.h. Price and particulars to HUTCHINSON, 1 Claremont Terrace, York.

"Elements of Pharmacy" (Wills); latest edition. WALKER, 68 West Hill, Wandsworth.

Old artificial teeth; cash by return. Messrs. DENT, 120 Greyhound Lane, Streatham, London.

Check-till, medium mortar, and suppository-mould. Full particulars, LEWIS, Chemist, Tisbury, Wilts.

"The Chemist and Druggist" for 1863, complete, for binding Price to "S. W." Office of this Paper.

6 1-cwt., 6 ½-cwt. square or round tins or drums for dry goods, lids complete. DUCK'S DRUG STORES, Cardiff.

Counter, window-fittings, cases, scales, dental hooks and apparatus; Dental Journal in exchange for C. & D., Saturdays. 78/39, Office of this Paper.

Dental vulcaniser, complete; gas apparatus; forceps, upper centrals, excising (upper and lower), special stumps (ditto); elevators. ALLEN, Chemist, Urmston.

Newth's "Chemistry," Clowes's and Coleman's "Practical Chemistry," Perkin and Kipping's "Organic Chemistry," George's "Practical Chemistry," Attfield's "Chemistry," "Selecta & Præscriptis," Lowson's "Botany," Greenish's "Materia Medica," "Art of Dispensing," State edition, condition, and price to "DISPENSER," c/o Dr. Gill, West Bromwich.